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THE
LONDON MEDICAL GAZETTE,

BEING A

WEEKLY JOURNAL

OF

Medicine and the Collateral Sciences.

SATURDAY, SEPTEMBER 8, 1832.

ESSAYS ON DIAGNOSIS.

BY

MARSHALL HALL, M.D. F.R.S. L. & E. &c.

ESSAY I.—*concluded.*

III.—ON THE DIAGNOSTIC ARRANGEMENT OF DISEASES.

It is said that there are more than fifteen hundred distinct varieties of the rose. It seems almost impossible that such a fact should be established; for when the number of objects and their similarity are so great, the distinction, identification, and enumeration of them, must be a matter of extreme difficulty. This difficulty is diminished almost infinitely by the simple means of bringing the objects together, and placing them *vis-à-vis* to each other, so that they may most readily be compared and contrasted.

Such is the design, such the object, of the diagnostic arrangement of diseases. Diseases which are similar, are, of course, apt to be confounded; the diagnosis can only arise from careful comparison and contrast: this is most readily accomplished by arranging such diseases, as it were in parallel lines.

It may frequently occur that the same disease, as inflammation and hysteria, may, in their different forms, resemble different diseases. In this case, the same disease cannot be placed in more than one part of the arrangement; perfection of classification being made to give way to practical utility.

The diagnosis and identification of diseases are, in this manner, greatly facilitated. This effected, and not otherwise, our knowledge of the pathology becomes available.

I.—DISEASES OF THE SYSTEM.

I.—FEVERS.

1. *Continued.*
The Complications.
2. *Periodical.*
The Complications.

II.—ERUPTIVE FEVERS.
The Complications.

III.—

1. *Irritation.*
The Complications.
2. *Exhaustion.*
The Complications.
3. *Delirium Tremens.*
4. *Erethismus Mercurialis.*

IV.—

1. *Acute Dyspepsia.*
2. *Chlorosis.*
3. *Hysteria.*
4. *Some Nervous Diseases.*

V.—INFLAMMATION.

1. *Simple.*
Its varied effects.
2. *Modified.*
 1. *Furunculus.*
 2. *Carbunculus, &c.*
3. *Specific.*
 1. *Rheumatic.*
 2. *Arthritic.*
 3. *Syphilitic, &c.*

VI.—SCROFULA; TUBERCLES.

VII.—HÆMORRHAGIA.

1. *From Constitutional Causes;*
2. *From Mechanical Causes:*
 1. *Intra-vasated, or congestion.*
 2. *Extra-vasated.*
3. *From the Skin;—Purpura.*
4. *From the Mucous Surfaces, or the Hæmorrhages.*

5. *In the Substance of Organs, or the Apoplexies.*

VIII.—SCORBUTUS.

IX.—MELANOSIS.

X.—ENCEPHALOSIS.

XI.—SCIRRHUS; CARCINOMA.

XII.—SYPHILIS.

II.—DISEASES OF ORGANS.

I.—DISEASES OF THE BRAIN AND SPINAL MARROW.

- i. *The Sudden.*
- ii. *The Acute.*
- iii. *The Insidious.*
- iv. *The Chronic.*
 1. *Of the Brain.*
 2. *Of the Cerebellum.*
 3. *Of the Medulla Oblongata.*
 4. *Of the Medulla Spinalis.*
- v. *The Mania.*

II.—DISEASES OF THE ORGANS OF RESPIRATION.

- i. *The Insidious.*
- ii. *The Acute.*
- iii. *The Chronic.*
 1. *Of the Larynx and Trachea.*
 2. *Of the Bronchia.*
 3. *Of the Lungs.*
 4. *Of the Pleura.*

III.—DISEASES OF THE HEART AND AORTA.

- i. *Diseases of the substance of the Heart.*
- ii. *Diseases of the Valves.*
- iii. *Diseases of the Surface.*
- iv. *Diseases of the Aorta.*
- v. *Nervous Affections.*

IV.—DISEASES OF THE ALIMENTARY CANAL.

- i. *The Acute Diseases.*
- ii. *The Insidious Diseases.*
- iii. *The Chronic Diseases.*
 1. *Of the Stomach.*
 2. *Of the Small Intestines.*
 3. *Of the Colon.*
 4. *Of the Rectum.*

V.—DISEASES OF THE LIVER, SPLEEN, AND PANCREAS.

VI.—DISEASES OF THE URINARY ORGANS.

1. *Of the Kidney and Ureter.*
2. *Of the Bladder.*
3. *Of the Urethra.*
4. *Of the Prostate.*
5. *Of the Penis.*

VII.—DISEASES OF THE UTERINE SYSTEM.

1. *Of the Uterus.*
2. *Of the Ovarium.*
3. *Of the Mamma.*
4. *Of the Vagina and Pudenda.*

VIII.—DISEASES OF THE FAUCES.

1. *Of the Tonsils.*
2. *Of the Velum Palati*
3. *Of the Epiglottis.*
4. *Of the Pharynx and Œsophagus.*

III.—DISEASES OF CERTAIN REGIONS.

- I. DISEASES OF THE NECK.
- II. DISEASES OF THE GROIN.
- III. DISEASES OF THE LUMBAR REGION.
- IV. DISEASES OF THE SPINE.
- V. DISEASES OF THE HIP.

IV.—TOPICAL INFLAMMATORY DISEASES.

I. DISEASES HAVING NO SINGLE SEAT.

1. *Phlebitis.*
2. *Inflammation of the Absorbents.*
3. *Erysipelas.*
4. *Furunculus.*
5. *Carbunculus.*
6. *Pustule Maligne, &c.*

II. CUTANEOUS DISEASES.

1. ACUTE.
2. CHRONIC.

V.—TOPICAL NERVOUS DISEASES.

1. PAINFUL.
2. SPASMODIC.
3. PARALYTIC.

This sketch of the diagnostic arrangement will give a tolerably just view of the extent of the subject of the diagnosis of those diseases which generally fall under the care of the physician, exclusively of surgical diseases, and even of puerperal diseases, and of the diseases peculiar to children.

It will be sufficiently obvious, that an accurate knowledge of diagnosis can only be attained by great attention and assiduous study. This will be still more obvious, when the numerous forms and complications of diseases are clearly

apprehended, as will be seen even on a cursory consideration of the subsequent Essay, on the diagnosis of fevers.

ESSAYS ON DIAGNOSIS.

BY

MARSHALL HALL, M.D. F.R.S. L. & E. &c.

ESSAY II.

ON THE DIAGNOSIS OF FEVERS.

The present Essay will afford an ample exemplification of the manner in which it appears to me that the subject of diagnosis should be studied and treated. I am quite of the opinion of M. Louis—"il n'arrive probablement jamais que des individus qui meurent d'une maladie dont le siège est bien déterminé, n'offrent de lésions que dans l'organe primitivement affecté*." And if this be true generally, it is still more especially so in fevers. In fact, our task of diagnosis is only half performed, when we have ascertained the case to be fever—a special form of fever. The complications may, mediately or immediately, be the cause of death. If they be undistinguished, or undetected, the first part of the diagnosis will be unavailing. In the course of fevers, the early detection of a complication is therefore of the utmost moment. This will appear very obvious on reading the subsequent pages. It will also appear of the greatest importance to cultivate a habit of watching and of renewed examination, for such complications.

Before I proceed to the actual diagnosis of fevers, it may be well to present the reader with such an arrangement of the different kinds of fever, as may conduce to the object we have in view.

OF FEVERS.

I. OF CONTINUED FEVERS.

1. *Common Fever.*

1. *The Acute Form.*
2. *The Protracted Form.*

2. *Typhus Fever.*

1. *The Milder Form.*
2. *The Severe Form.*
3. *The Sinking Form.*

II. OF PERIODIC FEVERS.

1. *Intermittent Fever.*

1. *The Quotidian,*

2. *The Tertian,*
3. *The Quartan,*
4. *The Reduplicated,*
5. *The Remittent, Forms.*

1. *Common Fever.*

This fever assumes two forms—the acute and the protracted.

1. *The Acute Form.*

I. *The History.*—The morbid affection which I propose to designate the common fever, occurs from fatigue, anxiety, and watching, as in unremitted attendance on the sick; from long exposure to cold or rain, as in taking long journeys, or, as I have often seen, in the labours of the harvest; from extreme errors in diet, &c. It usually comes on immediately after exposure to one of these causes, with chilliness, febrile heat, flushing, &c. Its duration is from ten to twenty days.

II. *The Symptoms* enumerated more fully are the following:—Redness, flushing, and tumidity of the countenance, injection of the conjunctiva, and heat, softness, and tumidity of the skin generally; the tongue is loaded, white, generally moist, swollen, and indented; the breath tainted. There are aching pains, lassitude, and muscular debility; headache; intolerance of light or sound, and, in the erect posture, vertigo or faintishness. The respiration is hurried; the pulse frequent, full, and soft; there are anorexia and constipation.

III. *The Complications* usually seen in this affection are,

1.—1. *Herpes Oris,* and

2. *Herpetic Sore Throat;*

but besides these, there is occasionally,

II.—1. *Encephalic,*

2. *Thoracic,* or

3. *Abdominal Inflammation.*

IV. *The Effects of Remedies (?)*

V. *The state of the System* is such as to admit of the flow of a moderate quantity of blood without syncope.

VI. *The Morbid Anatomy* of the acute form of common fever is unknown; uncomplicated common fever never proving fatal.

II. *The Protracted Form.*

I. *The History.*—This form of common fever comes on more slowly, and after a still more protracted exposure to the causes already enumerated; from disappointment and grief; from want and poverty, &c. Its duration is fre-

* Recherches de Gastro-Entérite, t. i. p. 419.

quently protracted through six, eight, ten, or even twelve weeks. The patient may then slowly recover, or glide into a state of phthisis.

II. *The Symptoms*.—The countenance, occasionally flushed at first, becomes shrunk, wan, sallow, and tremulous; the general surface shrunk, dry, harsh, and exfoliating; the hands are rough and harsh; frequently a circle of redness and burning is observed extending round the palm; there are muscular tremor and debility, then headache or vertigo, delirium or coma; the pulse becomes frequent and small; the respiration and the articulation are tremulous; the tongue becomes brownish and dry in the centre, or morbidly red, smooth, and dry; there is sometimes vomiting or diarrhœa; the urine usually deposits a copious pinkish sediment.

III. *The Complications* most frequently seen in this form of the common fever, are,

1. *Aphthæ of the mouth and throat*.

2.—1. *Cephalic*,
2. *Thoracic*, and } *Inflammation*.
3. *Abdominal*

3. *Tubercles*.

IV. *The Effects of Remedies* (?)

V. *The State of the System* (?)

VI. *The Morbid Anatomy* of protracted common fever, as distinguished from typhus, is altogether unknown. *Is there ulceration of Peyer's glands?*

II. *Typhus Fever*.

This fever appears under three forms; the mild, the severe, and the sinking.

I. *The History*.—Typhus is sometimes epidemic and sometimes endemic; its causes are contagion (?) malaria (?) the air of crowded cities; deficient and unwholesome food. It usually begins rather insidiously, and gradually assumes one or other of the forms just mentioned and about to be described. It attacks the young chiefly.

1. *The Mild Form*.

I. *The Symptoms*.—The mild form of typhus usually begins with pallor, languor and tremor, muscular debility, chilliness, alternating with febrile heat, and perhaps perspiration. There are headache and vertigo; the pulse is rather frequent; the tongue is whitish, and apt to be dry; there are anorexia, and frequently relaxed bowels. This condition may continue for a fortnight, and gradually subside.

II. *The Complications* consist of

1. *Cephalic*,
2. *Thoracic*, } *Inflammation*.
3. *Abdominal*,

III. *The Morbid Anatomy* of this form of typhus, is, I believe, similar to that of typhus in its severe form, varying only in degree.

IV. *The Effects of Remedies*.—There is early syncope on abstracting blood in the erect sitting posture; generally on the flow of about ten ounces.

II. *The Severe Form*.

I. *The First Symptoms* of the severe form of typhus are chilliness and febrile heat, early and peculiar muscular debility, and mental depression; the countenance expresses languor and anxiety, and is either pallid or slightly flushed; the articulation, the manner of protruding the tongue and of holding out the hand, and every muscular motion or effort, is attended with a peculiar tremor; there are headache, vertigo in the erect posture, delirium, and somnolency; the temperature of the general surface is only slightly augmented, and there are not unfrequently coolness and moisture. The tongue is whitish, and apt to become brown and dry; there is complete anorexia, and frequently a degree of griping and diarrhœa, and the alvine evacuations are frequently mingled with slight portions of mucus, or blood.

II. *The Subsequent Symptoms* are shrinking of the countenance, with dryness of the lips and sordes over the teeth, and suffusion of the eyes. Every thing in motion and posture denotes extreme muscular and nervous debility; the articulation is indistinct, the hand is held out with difficulty, the tongue is protruded with effort, and is often not drawn in again, from mental torpor; the tremor passes into subsultus, or spasm; the patient falls into the most prone position, unable to support himself even on the side, and is perhaps constantly occupied in picking the bed-clothes. There are delirium, or somnolency, or alternations of these two states, or violent delirium, or deeper stupor. The tongue becomes encrusted, deeply fissured, brown, and excessively dry; the lips are also frequently fissured, and bleed, and there is frequently epistaxis. The skin is various—sometimes cool and moist, sometimes of slightly elevated

temperature, frequently beset with miliaria, especially over the neck and thorax, and with petechiæ more generally. The pulse is slightly frequent, and easily compressible; there is frequently a sonorous rattle, with or without cough or mucous expectoration; there are generally intestinal pain and distention, and diarrhœa, with dark, offensive, flatulent, mucous, bloody, involuntary or unconscious evacuations. The urine is frequently partly retained with distention of the bladder, and partly passed unconsciously.

Comparisons.—Typhus fever is somewhat similar to the following diseases, with which, therefore, it must be carefully compared and contrasted:—

1. *Phlebitis.*
2. *Encephalic disease.*
3. *Delirium tremens.*
4. *Muco-Enteritis* *.

The diagnosis of these affections from typhus fever, will be best effected by carefully comparing and contrasting their characters respectively in every point. This plan will also avoid the necessity for much repetition throughout this work, and form one of the most useful exercises. I shall, in this place, only observe that no disease except typhus *conjoins* chilliness, febrile heat, early vertigo, somnolency or delirium, muscular debility and tremor, the peculiar state of the tongue, of the skin, of the bowels, &c.

Phlebitis is generally traced to a local wound or injury, except it occurs as a puerperal disease. There are a peculiar violence of rigor, anxiety of countenance, appearance of sinking, delirium, frequency of the pulse, hurried respiration, vomiting, diarrhœa, &c.

In encephalic disease there is generally none of the symptoms really peculiar to typhus: the muscular strength is unimpaired; the pulse, the tongue, the general surface, the state of the bowels, are comparatively little affected, and there are more simply the symptoms of local affection of the brain.

Delirium tremens, notwithstanding the two symptoms implied in its designation, is very different from typhus:

the tremor is less accompanied by debility, the delirium less attended by stupor; there is, on the contrary, considerable activity and constant wakefulness, the tongue and skin are moist, the breath tainted by some spirituous liquor, and the disease is readily traceable to its cause.

In muco-enteritis there is less febrile action, less debility, and more nausea, vomiting, and diarrhœa. This disease occurs in subjects of every age, frequently from some known cause: there is none of the peculiar state of mind, muscle, tongue, skin, &c. so characteristic of typhus.

III. *The Morbid Anatomy* of typhus fever seems to consist in a diminished cohesion of the particles which constitute the solids and fluids of the body: hence we find,

1st. Softening of the parenchymatous substance of all the organs—the brain, the heart, the liver, the spleen, the kidney, &c.

2dly. Softening, thinness, and ulcerations of the mucous membranes—of the epiglottis, larynx, trachea, pharynx, œsophagus, stomach, intestines, &c.

3dly. Rupture of the textures constituting the skin, and the serous and mucous membranes, and hence petechiæ, vibices, and effusions of blood, of bloody serum, &c.

4thly. Want of cohesion in the blood itself; the coagulum of which is soft, uncupped, and occasionally covered with a buff of the consistency of mere jelly.

5thly, *That change of structure which alone is constant, or nearly so—is inflammation and ulceration of Peyer's glands, especially occupying that part of the ileum situated near the cæcum, but extending over a considerable part of the intestines.* This point seems to be established by the labours of Roederer and Wagler*, Prost†, MM. Petit and Serres‡, M. Louis§, M. Cruveilhier||,

* De Morbo Mucoso; Goettingæ; 1762.

† Médecine éclairée par l'Observation et l'Ouverture des Corps; Paris, 1804, pp. lv. &c. It is an extraordinary work for the period at which it appeared. The author observes—"M. Bayle m'associa à ses travaux: dès-lors j'espérai du succès."

‡ Traité de la Fièvre Entéro-Mésentérique. Paris, 1813.

§ Recherches du Gastro-Entérite, 1829. A work which will constitute an era in the science of medicine, by introducing numerical precision into its data.

|| Anatomie Pathologique. Paris, 1830.

* The first of these morbid affections, compared with typhus fever, seems clearly to indicate the share of a morbid condition of the blood in inducing the symptoms. The second denotes the similar influence of a morbid condition of the blood itself and of its circulation, upon the nervous system.

Dr. Bright*, Dr. Carswell†, &c. It has been long disputed whether this affection be the *cause*, the *effect*, or a mere *complication* of typhus fever. It cannot, I think, be justly said to be any one of these. It is a part—an almost essential part—of this fever, and appears to bear the same relation to the entire disease which the rash and sore throat do in scarlatina, and the rash and the bronchial affection in rubeola.

These ulcerations appear under various forms, being granular, pustular, fungous, gangrenous, &c.

With these ulcerations are conjoined enlargement and softening of the corresponding mesenteric glands.

IV. The principal *Functional Complications* are,

- i. *Encephalic*;
 1. *Headache*.
 2. *Stupor*.
 3. *Delirium*.
 4. *Subsultus*.
- ii. *Thoracic*;
 1. *Cough*.
 2. *Expectoration*.
 3. *Rattle*.
- iii. *Gastric and Intestinal*;
 1. *Pain and Sickness*.
 2. *Pain and Diarrhæa*.
 3. *Melæna*.
 4. *Tympanitis*.
 5. *Symptoms of Perforation of the Intestine*.

V. The *Structural Complications*‡ are—

1. *Encephalic*, consisting of—1, effusion upon the arachnoid; 2, injection and softening of the cortical and medullary portions of the brain; and, 3, of similar affections of the cerebellum. This complication is slighter in degree, and less frequent in its occurrence, than is supposed.

2. Effusions of lymph, and ulcerations

of the epiglottis, the larynx, the trachea, the pharynx, the œsophagus, &c.

3. *Thoracic*, generally slight, and consisting of—1, adhesions, or effusion of bloody serum into the pleura; 2, hepatization, or splenization of the lung; 3, reddish mucus in the bronchia; 4, a livid red colour, thinness, and softening of the heart, denoted generally by irregularity and feebleness of the pulse.

4. *Abdominal*; these are—1, softening, thinness, ulceration, and the mameled state, of the mucous membrane of the stomach; 2, softening of that of the intestines, with constant ulcerations of the clustered glands of Peyer, and occasional ulcerations of the solitary glands of Brunner; 3, enlargement and softening of the mesenteric glands; 4, softening of the substance of the liver, spleen, kidney, &c.

5. *Perforation of the Intestine*.

The *symptoms* of perforation of the intestine are generally sudden pain and tenderness diffused over the abdomen, nausea and vomiting, sunken countenance, smallness and feebleness of the pulse, cold perspirations, with pallor over the whole surface, and rapid failure and sinking of the powers of life.

6. The *integuments* covering the sacrum are apt to ulcerate and slough from pressure, and those of parts covered with blisters, from irritation, in a degree which becomes somewhat diagnostic. There is also occasionally erysipelas.

6. *The Effects of Remedies*; and,

7. *The State of the System*.—There is, comparatively with health, and still more, comparatively with inflammation, little tolerance of loss of blood; syncope is early produced on opening a vein in the erect sitting posture.

III. *The Sinking Form*.

1. *The Symptoms*.—In the sinking form of typhus, or that designated the congestive, a fair little seen in hospitals, there is early coldness of the face and general surface, with a feeble pulse, stupor, deep breathing, extreme debility of the muscular system, so that articulation and all attempts to move are abortive; the eye is sunken, the voice husky, the evacuations perhaps involuntary.

This form of typhus is noticed in this place, in order that nothing practi-

* Reports of Medical Cases. London, 1827.

† By the liberality of Dr. Carswell, I, as well as many others, have repeatedly seen his incomparable drawings, amounting nearly to two thousand; and I have as repeatedly contemplated this gentleman's labours with unmingled admiration. They will long be the ornament of the London University. I rejoice to know that Dr. Carswell is at length engaged in preparing Elements of Morbid Anatomy, with plates, for publication; this work must infinitely surpass every thing of the kind published in this kingdom.

‡ Throughout the whole of these essays I understand by the morbid anatomy, such changes as are *essential* to the disease; and by structural complications, such as are only of more or less frequent occurrence.

cally useful may be omitted, and that the student may be aware of a form of disease not of frequent occurrence. It can scarcely be mistaken for any other disease.

2. *The Morbid Anatomy*; and,

3. *The Effects of Remedies* appear to be unknown, or, rather, involved in hypothesis.

II. OF PERIODIC FEVERS.

1. *Intermittent Fever.*

I. *The History.*—The *Causes* of intermittent fever in its first and subsequent attacks, are the miasmata of marshes, stagnant water, and humid localities, and the north-easterly winds. The disappearance of intermittent fevers from London and its neighbourhood, and from other localities in which they formerly prevailed, is ascribed by Dr. Willan, and by Sir Gilbert Blane, to the practice of draining, and other improvements in agriculture. The *Course* is marked by successive distinct, cold, hot, and sweating stages; and these are recurrent every second, or every third day, or at other intervals, giving origin to the designations, quotidian, tertian, quartan, &c.

1. The *Quotidian* has an interval of twenty-four hours, a paroxysm of moderate severity, but of long duration, beginning with a slight cold stage, generally in the morning. It is apt to assume the remittent form. It occurs principally during the spring.

2. The *Tertian* has an interval of forty-eight hours, a severer cold stage, a shorter paroxysm, recurrent generally about noon, and followed by much perspiration. This is the most frequent form of intermittent, and is observed to be milder in spring than in autumn.

3. The *Quartan* has an interval of seventy-two hours, a short paroxysm, and a long intermission. The paroxysms usually occur after noon, with a long and severe cold stage, a gentle hot stage, and slight perspiration. The quartan intermittent fever occurs chiefly in autumn, is apt to prove obstinate, without having any tendency to assume the remittent form.

4. Intermittent fever sometimes assumes the *Reduplicated*, or merely *Remittent* forms; and sometimes every kind of *irregularity* in form, and in the intensity of its paroxysms, or of their different stages.

The recurrence of the paroxysm may

not be always so accurate in point of time and hour in different cases, as I have mentioned; yet attention to this point, in the same case, is a very important means of diagnosis in obscure cases. The rigors in suppuration and in phthisis have not such sustained regularity of return.

II. *The Symptoms.*—The paroxysms of intermittent fever begin with yawning and languor, and a sense of creeping along the back; the patient then shivers with cold; the countenance and the general surface are pale, shrunk, and cold; there is that state of the skin termed ‘cutis anserina,’ and the nails assume a livid hue; the respiration is sibilant; the pulse is small and frequent, and perhaps irregular; there are anorexia and thirst; the tongue is dry and clammy; the urine is limpid.

The cold stage gradually subsides, and the countenance becomes flushed and tumid, and the eyes injected, whilst the general surface is turgid, hot, smooth, and dry; there are frequently acute pains of the head, throbbing of the temporal arteries, intolerance of light and sound, and delirium; the respiration is frequent, but less anxious; the pulse strong, full, and frequent; there are urgent thirst, with continued dryness of the tongue; the urine becomes high coloured.

In the sweating stage the countenance assumes nearly its natural appearance; the skin loses its tumidity and heat, and becomes covered with perspiration. The head is relieved, and sleep often supervenes; the respiration becomes free, the pulse nearly natural; the urine deposits a degree of sediment*.

The paroxysm over, the patient is left somewhat pale and languid, and there are headache and anorexia. In the commencement of intermittent fever, the apyrexia is, however, sometimes almost free from indisposition.

III. *The Complications* of intermittent fever are frequently, like the fever itself, periodic,—intermittent, or remittent; and sometimes, without fever, there are similar paroxysms and intermissions, or remissions, of local affections.

The principal of these are—

1. *Hemicrania.*

* The observations made upon the urine by the older writers on intermittents, are confirmed by M. Andral, in the *Clinique Médicale*, Ed. 1, t. i. p. 479.

2. *Pain of the Eye-brow.*
3. *Thoracic Pain.*
4. *Splenic Pain and Tenderness.*
5. *Pain of the Testis.*
6. *Other Topical Pains.*

These affections sometimes assume a more aggravated form, and there are—

1. *Headache, Delirium, Coma, or Amaurosis.*
2. *Thoracic Pain, Cough, Asthma, or Syncope.*
3. *Colic, Cholera, or Diarrhœa.*

These local affections may precede, accompany, or follow intermittent fever; or they may exist variously in the intermittent or remittent form, independently of febrile symptoms. They will be particularly noticed hereafter.

The principal permanent complications are—

1. *Enlargement of the Spleen.*
2. *Anasarca.*

IV. *The Morbid Anatomy* of intermittent fever seems really to be little known. The spleen is the organ chiefly and most frequently affected; it becomes enlarged. This enlargement is discovered during life by recurrent pain, dulness of sound on percussion of the false ribs of the left side, and, at length, on examining the region of the spleen by pressure. The spleen may remain enlarged, ascend, or descend, and constitute a mode of ascertaining the existence formerly of intermittent fever, without materially affecting the health.

V. *The Effects of Remedies.*—The influence of the quinine in intermittent fever, pains, &c. is so marked, as to be at once diagnostic of the disease, and suggested for all cases of distinctly intermittent character.

CROTON OIL IN CHOLERA—RECOVERY UNDER THE SALINE TREATMENT.

To the Editor of the London Medical Gazette.

Wolverhampton, Aug. 27, 1832.

SIR,

HOLDING the office of Secretary to the Board of Health in this town, I think it a duty I owe to the public to communicate any plan of treatment or remedy

which, from my own experience and that of others, I consider to have been useful in cases of cholera. I beg to premise that the disease has shewn itself in this town and neighbourhood to be of a highly contagious nature; almost every case having been easily traced to that cause, and the medical men and nurses having been particularly affected.

The remedy which I wish most particularly to recommend to further trials is the croton oil, in the *perfectly collapsed stage*, when the pulse is as it were extinct. In most of the cases where I have used it, the effect has been to arrest, for a time, the vomiting and purging, and, after a few hours, to produce the dark-green stools as described by Dr. Teggart, in his lately published letter. I was led to try the remedy in my two first cases (a woman and her daughter, both collapsed, but the pulse of the former just perceptible), by the patients' refusing all medicine. The mother died eight hours afterwards, but without a return of the vomiting and purging; the child passed the green stools in a few hours, and is still in the hospital slowly recovering. The next case was a child of four years—cold, blue, and pulseless, but still able to walk (a very common circumstance, I find); to whom I gave two drops rubbed up with sugar and two oz. of water (a teaspoonful being taken every half hour), with the effect of rendering the little sufferer warm, flushed, and bright-eyed, after the usual evacuations, in about eight hours. Other cases treated in the collapsed stage are still under cure; others have died. I can only speak from my own experience as to the stage in which the remedy has been used in this township; but Dr. Macann, of the Central Board (now staying here to direct our proceedings), informs me that experiments are now being made with the croton oil in other places. I do not mean to claim any specific power for croton oil in cholera, but I think no suggestion should be disregarded when we are publicly told, by one of the most distinguished physicians of this country, that "a person in the blue stage will have nearly the same chance of recovery, if wrapped up in blankets and laid in bed, as with all the remedies hitherto proposed administered to him *."

* See a late number of the *Lancet*—Dr. Elliotson's Lecture.

With respect to the saline treatment, I may state that a boy in decided colic, six of whose family have died in this town, of cholera, in the last week, recovered solely under that plan of treatment; the powders, as prescribed by Dr. Stevens, being diligently administered every quarter of an hour, for some hours. I may also state, that when the muriate exceeds the carbonate of soda, as in some of the powders recommended, I find they almost always increase the vomiting and thirst; both which are rather allayed by these containing sodæ mur. ʒj., soda carb. ʒss., chlor. pot. gr. vii. The former I now always use, allowing no other drink to the patient.

The disease, I am happy to state, is almost confined to the outskirts of the town, among the colliers and ironfounders; except in one filthy court, in which the family mentioned above resided.

That this letter may be instrumental in saving even one life, is the hearty desire of, sir,

Your obedient servant,

T. OGIER WARD, M.B. Oxon.

COMPARISON OF VARIOUS MODES OF TREATMENT IN CHOLERA.—EFFICACY OF SALINES.

To the Editor of the London Medical Gazette.

Convict Hospital Ship,
Woolwich, August 27, 1832.

SIR,

THE profession is deeply indebted to you for having opened the pages of your valuable journal for the discussion of the merits of the saline mode of treatment in cholera.

In prosecuting an inquiry of such importance to the welfare of the community, and of such deep interest to the profession, it cannot be too generally lamented, that decisive and final opinions have been hastily promulgated, by some extolling the practice as in almost every case infallible, and by others declaring it totally inert and injurious.

Considering that its employment has been hitherto by far too limited to warrant its general assumption or rejection, the object of this paper is to add a few facts to those already published, and thereby promote the laudable purpose you have attempted.

Cholera appeared in this establishment about the middle of March,

but occurred in isolated cases until the 5th and 6th of May, when its irruption became general and the cases numerous.

Of about 800 individuals, of whom this establishment was then composed, a very great majority were affected with the premonitory symptoms. Many facilities being offered, the utmost vigilance was employed to secure their early detection. All the men were medically inspected three times daily: if any individual had three evacuations while at labour, he was placed under observation, and his dejections examined. By this means the cases of sudden, profuse, and serous diarrhœa, amounted for some time to at least 30 daily. Some of these had vomiting, faintness, and cramps. Most of them were attacked in the morning, and were treated by a single dose of 5 or 6 grains of calomel combined with 1, 2, or 3 of opium, followed by two ounces of the saline mixture every hour; and, if the purging continued, a starch enema, with 2 drachms of the carbonate of soda, 4 of common salt, and 1, 2, or 3 of the tincture of opium; with gruel for diet. Under this regimen, with subsequent small doses of rhubarb and castor oil, most of these persons recovered, and were never admitted or reported as cholera.

Satisfied that as much was effected as the most unremitting and assiduous nursing, and the steady employment of remedies, could accomplish, the following table and remarks are offered, as affording the results, carefully and impartially collected.

Treatment.	Cases.	Deaths.	Recov.
By Bleeding and Stimulants.	13	5	8
By Stimulants only.....	4	1	3
By Bleeding and Salines.....	56	11	45
By Salines only.....	65	9	56
Hospital Patients.....	10	10	0
Total	148	36	112

The treatment described as "Bleeding and Stimulants," consisted of venesection to the amount of 6 or 8 ounces; the administration of salt and mustard emetics; of hot salt water enemata; hot air bath; bottles of hot water and mustard cataplasms externally; and of brandy, ammonia, and Cayenne pepper, in liberal and oft-repeated doses internally. No opium was given, as these

were the earliest cases, and we were desirous to observe the disease unobscured by its effects. Thirteen were subjected to this treatment, five of whom were lost in periods of 5, 9, 10, 11, and 24 hours from admission; and of the eight who recovered, three were moderately and five severely collapsed. Only one of these had the insensible purging, said to be a very fatal symptom; and he appeared to derive most benefit from the mustard poultices, which were extensively applied for several hours.

The cases treated by "Stimulants only," were seen early. Two had severe premonitory symptoms; one was moderately collapsed; and one died in 72 hours of muco-enteritis.

Until reading the letter of Mr. Wakefield, published in the Medical Gazette, on the efficacy of the saline mode of practice, the principal dependence had been placed, in collapsed cases, upon cautious bloodletting, salt and mustard emetics, and mustard poultices. The hot bath, although always at command, had been found in many cases impracticable; and the hot air bath decidedly injurious. Having prepared a mixture, every two ounces of which contained one of the powders used at Cold-Bath-Fields, with a small quantity of brandy*, all future cases were treated (after the above preliminary measures had been practised) to the effect of this dose, repeated every half hour, until reaction was accomplished, when small doses of calomel and opium were given, every two hours, till the gums were slightly sore, and healthy secretions established; after which the sulphate of quinine and mild aperients usually completed the cure. Fifty-six were thus treated, of whom eleven died, at the following periods after the commencement of the treatment:—

In six hours . . .	1 (a relapse.)†
— twelve do. . .	5 (1 a relapse.)
— fifteen do. . .	1
— eighteen do. . .	2
— twenty-six do. .	1
— four days . . .	1 (a relapse.)
	<hr/>
	11

* Although in Dr. Stevens's practice stimulants were entirely prohibited, a small proportion of brandy was added to this mixture, because most of the patients had previously led irregular lives, and been long accustomed to smoking and dram-drinking.

† These relapses were all previously recovered from every appearance of danger, but are included as recoveries.

Of the recoveries, seven had severe premonitory symptoms; fourteen were moderately, twenty-five severely collapsed; fifteen had insensible serous purging; and in several, the pulse at the wrist and the secretion of urine were absent for two or three days. A few had smart inflammatory affections of the abdominal viscera, and one or two had partial dropsy during their recovery.

Under the treatment described as "Salines only," are included all those cases in which, during collapse, the following constituted the whole treatment:—A salt-water emetic, followed by a dose of the saline mixture every quarter and half hour; by an effervescing draught, with an excess of soda, every hour; by the hourly administration of an enema, composed of starch, carbonate of soda, and common salt, and occasionally the Tr. Opii; by saline beverage, consisting of barley-water, given *ad libitum*, to every pint of which two drachms of carbonate of soda had been added; and by mustard poultices.

Of sixty-five cases so treated, nine were fatal, the period of decease being respectively,

In nine hours from admission .	4
— twelve hours	2
— twenty-four do.	1
— thirty-six do.	2
	<hr/>
	9

In the case fatal in twenty-four hours, there was partial reaction and relapse; and the patient who died in thirty-six hours was admitted early, and treated by saline injection into the veins.

Of the fifty-six recoveries, sixteen had premonitory symptoms; ten were moderately, and thirty severely, collapsed; seventeen had insensible purging.

Under every variety of treatment, the vomiting and hiccup continued occasionally obstinate during recovery, and a few had partial dropsy; but it was only requisite to employ leeches in four cases; venesection in one (a month after, for anasarca); and of the whole number of cases (148) only two were fatal after re-action: one of these was an hospital patient upwards of 70 years of age, who was treated by salines only, lived a week, and died of apoplexy; and the other the case of enteritic inflammation already mentioned.

The hospital cases were such as

would have been fatal under any acute disease, being patients far advanced in phthisis, fever, and in one or two the arteries were ossified from extreme old age, and death arose from congestion during re-action.

Leaving these facts without comment for the present, I beg to subscribe myself, sir,

Your most obedient servant,
P. BOSSEY, M.R.C.S.

REPORT OF CHOLERA AT WARRINGTON.

SUPERIORITY OF THE SALINE TREATMENT.

(From a Correspondent.*)

WE have been favoured with the perusal of a manuscript containing a list of cases of cholera, which have occurred in and in the neighbourhood of Bank-Street, Warrington, which has been the principal seat of the disease in the town. We may add, that the manuscript has been drawn up by a gentleman of great respectability, and one of the oldest practitioners in that place.

There had been some suspicious cases in Warrington previous to the 18th of June, but the inhabitants generally continued healthy until that date. On the evening of that day, however, a woman named Elizabeth Mills, aged about 30, was attacked in the marketplace with evident symptoms of cholera. This woman had walked that morning from Manchester, where her husband had been attacked with cholera, on the evening of the 16th; he died on the 17th, at five o'clock P.M., and was buried early on the morning of the 18th. The widow was attacked about eight o'clock in the evening, and was taken to a house appointed for the purpose of lodging such persons as are conveyed by passport through the town. She recovered after a severe illness; but her child, whom she had carried from Manchester, and who had been taken to the workhouse, was seized on the 20th, and died on the 23d.

On the same day that this child died, Philip Inghram, a travelling vender of medicines, arrived from Manchester, with his wife and family. They went

to reside in Bank-Street. The following morning one of the children was attacked with cholera, and died on the 28th, of the consecutive fever. On the 26th Inghram himself was attacked: at noon he fell suddenly into a state of collapse, and died at midnight.

The family of Inghram was lodged in a house belonging to a Mr. Lawless. This house was remarkable for its cleanliness; but on the 24th Mr. Lawless was taken ill, and others of his family were subsequently attacked. From this house the disease spread to the neighbourhood; and from that time to the present the disease has continued its ravages, and still exists in several parts of the town. We think it the less necessary, however, to follow up the subject of its introduction, as we observe, by a small tract which Dr. Kendrick has published on cholera, that Mr. Glazebrook, the Secretary to the Warrington Board, is about to draw up an account of the rise and progress of cholera in that town.

The manuscript to which we have referred contains the history of one hundred and eight cases, in and in the neighbourhood of Bank-Street. Various plans of treatment were tried. The following is an outline of the result, up to the time that the statement is made out.

	Cases.	Deaths.	Reco- veries.
Where the patients obstinately refused to take any medicine whatever	4	4	0
Where the patients were either very old previous to the attack, or neglected, and seen by the physicians so late, that no treatment was of any use	30	30	0
Treated by Morrison's purging pills	3	3	0
Treated by bleeding, followed up chiefly by the antiphlogistic treatment, as recommended by Broussais	13	13	0
Treated with opium and stimulants	28	28	0
Treated with bleeding, and the saline treatment ...	7	0	7
Treated by the saline remedies, without bleeding...	23	2	21
	108	80	28

* The names of the parties have been sent to us.—ED. GAZ.

In one of the very worst cases which was under the saline treatment, where collapse came on almost instantaneously, a piece of lint, about four inches square, was immersed in a liquor ammoniæ; this was applied to the skin. When the cuticle had separated, it was taken off, and the oxymuriate of mercury was applied to the abraded surface. The saline powders were given regularly; re-action came on. In ten hours the patient perceived the mercurial taste in the mouth, and recovered, after having been several hours in a state of complete collapse.

TREATMENT OF CHOLERA.

To the Editor of the London Medical Gazette.

SIR,

It is much to be regretted, that persons holding a respectable rank in our profession should condescend to give vent to angry feelings in a scientific journal, and still more so that the cause of truth should be injured, by being involved in a personal dispute. With every allowance for the excited feelings of Dr. Stevens, arising from the genuineness of his cases of cholera being called in question, he should not have wandered from that point, nor allowed himself the use of such unguarded expressions as unsuccessful and unscientific, applied to opium and calomel. If he could, or would, lay aside for a moment his prejudices in favour of the exclusive use of his salines, and examine the numerous cases in which success has attended the exhibition of *small doses* of opium, in conjunction with calomel, and followed by mild purgatives, under the direction of practitioners, to say the least, as capable of judging as himself, he would be convinced that these medicines were entitled to some consideration; and farther, if the evidence be sufficient to induce him to give this plan a trial, he will find that, on the one hand, as a progressive deterioration in the quality of the alvine discharges is one of the great characteristics of cholera, which may be said to date its commencement from the first deviation of these discharges from their natural

state; so, on the other hand, he may observe that the return to health may be dated from the moment that the calomel begins to act upon the secretions. The dejections become less frequent, and the increase in their colour and consistence, which is to be regarded as the index of the operation of the calomel, is as progressive towards recovery, and attended with an abatement of all the other symptoms. He will find, moreover, that, *provided brandy, ammonia, mustard emetics, &c. be abstained from*, there will scarcely be a symptom worthy of the name of febrile, attendant upon re-action; and the average number of days that patients subjected to this plan of treatment require attention, will be less than six. Now this appears to be the very same result which attends his own practice, in cases seen soon after the commencement of the attack, and is clearly referrible to the same principles; consequently, such a plan is neither unsuccessful, nor unscientific; and we must either conclude, that Dr. Stevens has never observed its effects, or does not understand the principles upon which his own practice is founded sufficiently to enable him to see how other medicines, capable of producing the same results, may be equally, and even *more efficacious*. This I say advisedly, because by how much calomel has a greater power of exciting secretion than salines, by just so much will it be successful up to a later period of the disease. We must still, therefore, under these circumstances, be content to place our confidence in opium and calomel, until some substances shall be found to *produce the same effect more speedily*. The same principle appears in the readiness with which this disease is relieved by purgatives in children.

There is one observation of Dr. Stevens in which we must all agree. He says, "Every day I have additional reason to believe, that the mortality will be greatly diminished when the principle of the practice comes to be more generally understood, and where it is tried by practitioners who know how to vary the treatment according to circumstances;" for until it is, we cannot deny that our profession justly deserves the ridicule which necessarily attaches to it, on account of so many opposite medicines having each at dif-

ferent times been brought forward as the one thing needful.

I have the honour to be, sir,

Your obedient servant,

J. W. EARLE.

14, Old Broad-Street,
Sept. 1, 1832.

ANALYSES & NOTICES OF BOOKS.

“L'Auteur se tue à allonger ce que le lecteur se tue à abréger.”—D'ALEMBERT.

The Effects of Arts, Trades, and Professions; and of Civic States and Habits of Living, on Health and Longevity, with Suggestions for the removal of many of the agents which produce Disease, and shorten the Duration of Life. BY C. TURNER THACKRAH, Esq. Second Edition.

WE have before admired the great industry and ability displayed in this work, and we continue to regard it as a most valuable contribution to political medicine. The author informs us that in the present edition he has given the results of his examination of about 120 additional employments, and that he is still busily engaged in a field in which much remains to be done—in which, indeed, little or nothing had been done before he took the subject in hand. The work, as we presume most of our readers are aware, is of an essentially practical nature, and abounds with facts which supply ample material for grave reflection. The remarks which Mr. Thackrah has supplied are generally brief, but pregnant; any thing rather than book-making seems to have been his object. It will require much preaching and persuasion to abolish the evils, especially in manufacturing towns, of which he so pithily complains; but if any thing effectual can be done in that way, it will be, in the first instance, by the method adopted by the author; that is, by the publication of a book full of curious matter of fact, and suited to the perusal of every class of readers.

There is an amusing and very sensible passage which just presents itself to us for extraction. Mr. Thackrah, it will be seen, while treating of the modes of life peculiar to artists, tradesmen, and professional persons, has not neglected

the calling of another considerable class, who deserve to be noticed *per se*—we mean the *bons vivans*. Our author is evidently not an abstinence-society man; he proceeds to say:—

“The proper culture of the stomach is certainly not only to be allowed, but enjoined. A celebrated Greek (Aretæus) heads his chapter on gastric disease with the remark, that the stomach presides over our pleasures and our pains. And assuredly no practitioner of medicine who closely observes his patients—no man, in fact, who closely observes himself—can hesitate in frequently ascribing the source of irritability, anger, and despondency, or, on the other hand, of cheerfulness, hope, and benevolence, to the state of the digestive organs. The kinds and quantity of food, therefore, and the modes of its preparation, afford a study by no means unworthy of science; and *works like Kitchener's deserve a place in every library*. But assuredly the art is carried by many to a lamentable extreme. Cookery becomes the minister of gluttony. The palate is stimulated to excess; the stomach is consequently gorged; its powers are weakened; and venous congestion of the abdomen, with all its attendant evils, is established. The disposition and power for muscular exertion are greatly reduced; the brain, and the whole nervous and vascular systems, suffer from the improper quantity and quality of the circulating blood.”

The following little notice of the primitive simplicity of our forefathers may not be uninteresting:—

“The evil of refined and excessive eating is not new. Livy complained that in his day cookery had become an art—a noble science; that cooks were gentlemen—*venter Deus*. Another ancient remark of the Rhodians, that they built houses as if they were immortal, but they feasted as if they meant to live but a little while. Seneca justly observes, *Multos morbos multa fercula fecerunt*; and again, *Innumerabilis esse morbos miraris? Coquos numera!* No medical man of the present day could have given a more dismal picture of the effects of excess, than the 95th epistle of this philosopher. But without referring further to the faults of other nations, or to the monstrous excesses of individuals, like Soliman the Calif, and Maximus the Roman Empe-

ror, I would remark on the character of Britons. The English, it seems, have always been remarkable for full living. Chaucer, in his *Persones Tale*, arraigns their 'divers meats and drinks, bake-meats and dishmeats, brenning (burning) of wild-fire.' *Ampliter viventes*, says Polydore Vergil, *in prandiis et in cœnis*. 'Banquets, rere-suppers, and juiceries betwixt meals,' are mentioned by Bishop Fischer as the common excesses of his countrymen. And in Scotland, it appears from Holinshed, that a law was made in 1433 'for the restraint of superfluous diet.' We afterwards find Jeremy Taylor inveighing against the luxurious tables of his day:—'Strange that for the stomach, which is scarce a span long, there should be provided so many furnaces and ovens, huge fires, and an army of cooks, cellars swimming with wine, and granaries sweating with corn; and that into one belly should enter the vintage of many nations, the spoils of distant provinces, and the shell-fishes of several seas!'

A Letter addressed to the Central Board of Health, written with the view of establishing rational principles for the Treatment of Cholera; and shewing the Danger of the Mode of Practice at present generally followed. By JOHN GEORGE FRENCH, Surgeon to St. James's Cholera Hospital, and Resident Surgeon to the Infirmary of St. James, Westminster.

THE circumstance of our having published, last week, two interesting papers on the treatment of cholera by means of cold water, induces us to take notice of the pamphlet before us. The opinion of the author may be very shortly explained. He thinks "that the alimentary canal becomes subject to a process which altogether supersedes digestion, and by this process a large quantity of fluid is produced as an excretion, which rapidly diminishes the bulk of the blood: with the mechanism of this production, we are as yet unacquainted."

And again:

"That in some instances the disease continues its progress till the death of the patient; but, in the very large majority of cases, when left to nature, the disease ceases when it has produced a state of collapse, varying in intensity."

Mr. French is farther of opinion (in which we entirely concur with him), that brandy and opium, as hitherto too often administered, do harm; and that, on the contrary, the extreme thirst which attends the collapse is an indication on the part of nature for fluids—especially cold water, which is the most grateful to the patient. The following short paragraph contains what farther of Mr. French's views we deem it necessary to give.

"As long as there is thirst, with a sensible diminution of the evacuation of the bowels, there is every rational hope that reaction will take place by the efforts of nature, if no mischievous interference be permitted. The situation of the patient is now too critical, while such a process as I have described is going on, to hazard the chance effect of medicines which the speculations of the ingenious may suggest; though I may take occasion to observe, that Dr. Stevens's saline mixture is harmless at the least, if not beneficial; the thirst may be by this probably increased; and the kidneys may be probably stimulated: but if it should be observed that the respiration becomes exceedingly hurried, and the *alæ nasi* flapping, and pain and considerable distress is experienced in the chest, the action of an emetic, and the local stimulus of a sinapism, may be extremely useful. The feelings of the patient with regard to temperature must be attended to. It is unwise to add to the oppression of the nervous system, by subjecting him to a disagreeable degree of heat, which is so commonly done."

The most remarkable part of the brochure before us, is the extremely limited data with which the author furnishes us for opinions so much opposed to those generally received: only three cases are given in illustration, and of these one only was treated by the cold water as the sole internal remedy; the first patient having been put upon salines (muriat. and carb. of soda and potass) and calomel, and the second, till after re-action had commenced having refused every thing, drink included, owing to a determination to take no medicine. The third had sinapisms to the spine and stomach, hot water to the feet, and cold water for drink, *ad libitum*. All three recovered.

The coincidence of this paper with that of Dr. Shute is remarkable, and makes it desirable that farther trial should immediately be given to the abandonment of opium and stimulants.

It would be very acceptable if Mr. French would favour the profession with tabular or other very abbreviated views of his cases—for we cannot suppose that the doctrines adduced, and which are really important, have been given to the public without extensive means of observation.

M. BROUSSAIS' ACCOUNT OF HIS OWN DOCTRINES;

*In a Letter to the Académie des Sciences,
August 6, 1832.*

GENTLEMEN,

A PHYSICIAN who has passed the best part of his life in labouring for the advancement of the science which he cultivates, formed long ago the design of laying before the Académie an account of his labours, and of the changes which he has seen effected in the healing art.

It was blameable, no doubt, to have deferred till now the accomplishment of that design; nor can any better apology be offered for the delay than the desire which the author had of rendering those propositions more convincing which he wished to infer from his observations, and the changes of which he is about to speak. He comes, in short, gentlemen, to request a brief audience; for he has felt the want of your support in seconding his efforts, and those of his co-operators, in a work which he believes to be useful to society. Anxious not to waste the time which you so usefully devote to the progress of knowledge, he will at once broach the subject upon which he is desirous of your consideration.

Medicine, as every one knows, is the science which teaches us to recognize and to treat the diseases of living beings; but we shall confine our remarks to those of the human species. Medical men, then, are, as it has been said, the ministers of nature; men devoted to acts of benevolence and mercy; men whose great object is the doing good to their fellow-creatures. Nothing, consequently, is more natural than that they should be ever desirous of the means.

While yet a youth, filled with these ideas, the individual who has the honour to address you felt himself (even from the year 1804) unpleasantly affected, from his imperfect ability in the military hospitals, to perform the delicate duty which the government had imposed on his conscience. Was it his fault that he was not more successful in the practice of his profession, or the fault of the system in which he had been brought up? He worked incessantly for five years, and in 1809 appeared his *Histoire des Phlegmasies Chroniques*.

Remote from Paris, where, indeed, he was little known, and a stranger to all man-

ner of intrigue, he had no opportunity of setting forward this work at the time of the *concours* for the decennial prizes, in 1811. He obtained, however, an honourable notice on the occasion—an encouragement which had a powerful effect in supporting his zeal and redoubling his exertions.

The History of Chronic Inflammations is a work wholly experimental. At the time it was written those diseases were scarcely known. Pugol de Castres (of whom scarcely any one dreamt, but who was speedily exhumed upon the appearance of this work) had treated only of suppurations of the visceral cavities: those slow and insidious inflammations which have their seat in the membranous tissues in the chest and abdomen were completely overlooked by the physicians of the age. Pinel had given them no place in his *Nosography*—there was nothing in lieu of them but certain *organic derangements*. Corvisart, who so eminently possessed the art of exploring disease in the functions, had arrived at no correct notion of them. He knew how to determine the seat of a tumor in the viscera, but he could give no account of its nature, if it was not connected with pulmonary consumption, or malady of the heart; he paid no attention to what was commonly called organic derangement, while he saw no cause for the slow but gradual decay of the patient, except in a state of debility or cachexy—terms which conveyed to the mind nothing, but which at the same time, unfortunately, supplied wrong indications for the treatment.

The History of Inflammations threw light upon all those points hitherto obscure; it shewed how inflammation was principally instrumental in the origin of those adventitious masses which developed themselves among the viscera; it exhibited how, under another form, the same inflammation invaded insensibly the tissue of their membranes, and brought on that state of emaciation which was usually attributed to the feebleness of the solids and the depravation of the liquids; it did more; it proved that those weaknesses and depravations were often curable; it determined the period of their being so, and the mode of subduing them.

From that moment, science had a new face: *organic diseases*, so vaguely understood before, had now a sense that every medical person could comprehend. The great business, then, was to palliate their direful effects—to prevent them, when their germs became visible, and practice assumed a rational form in respect to this important section of our physical ailments.

The History of Inflammation was, however, merely the first step towards that reform of which practical medicine stood so much in need. The class of fevers was in no more satisfactory condition to the under-

standings of men of sense, than those of the cachexies had been. Continued fevers presented themselves in general to practitioners under two very different aspects; the one they attributed to the inflammation of some particular organ; the other, which they called *essential*, was deemed independent of all local affection. The cause of the first was found in inflammation of the brain, and went by the name of *encephalitic*; or in that of the lungs, or of the abdomen, with a phlegmonous form—that is to say, with a pulsating tumor and burning heat; or in that of the peritoneum; or, finally, in any or all those inflammations which their situation at the surface rendered appreciable to the sight and touch of the practitioner. I say that all these febrile movements accompanying palpable inflammations were apprehended as they should have been—being attributed to their true cause. But *essential* fevers were supposed to have no *locale*: nobody knew to what to refer them; and in this state of ignorance it was attempted to characterize them, either after their predominant symptoms, or other data still more obscure. Was the serosity of the bile predominant, they were called *bilious fevers*: was there apparently a superabundance of mucous in the fecal matter, they were called *mucous*, or *pituita* fevers: was the heat remarkable, they were called *hot fevers*: the body cold—*cold fevers*: and if the patients at the same time complained of a raging heat within, they gave them another name.

When the powers were sunk in fevers, they were called *asthenic* or *adynamic*: if the body exhaled a repulsive fœtid odour, they were styled *putrid fevers*, although many physicians of the best sense rejected with contempt such a denomination, aware that putridity was incompatible with life. Other fevers were *nervous* or *ataxic*, and others called after the country or place where they most prevailed: thus we have had the camp, the prison, the hospital, the Hungarian, the Low country, fever: we have had, in short, from the skin affections also, the fevers denominated the *petechial*, the *miliary*, the *nettle-rash*, &c. &c.

In some instances the name and character were derived from a supposed unknown and perfidious agent, which was ever deceiving the vigilance of the physician, and throwing him out of his calculations. Hence the *insidious* form. And when a better name could not be found to describe the danger of the complaint, we had the *pernicious* fever.

Let us not be misunderstood as attempting to depreciate the labours of those who have given us these results, for of such are the materials employed by modern writers for the structure of the evidence of science; and our gratitude and veneration are due to the laborious men who have supplied us with

them. Our object is simply to shew in a brief sketch the progress of the human mind in the acquisition of medical knowledge, and to describe the actual state of our art at the period in question. But we may offer our opinion.

And what, gentlemen, can you see of philosophy in the proceedings of the old school regarding these supposed essential fevers? Can you see in them a *science*? Alas! there is nothing there but chaos and confusion; nothing but an exhaustless source of controversy, not merely on the nature, but, what is far more serious, on the treatment of disease. In fact, any thing like agreement was rare; for in one and the same disorder, some would take their indications from the biliary or mucous secretion, while others would have recourse to the nervous system, or the debility, or putridity, of the patient.

Such was the state of medical science when, in 1816, was published the first edition of the *Examen des Doctrines Médicales*. This work, the fruit of a more extended experience, went far beyond its predecessor the *Histoire*: it inveighed strongly against the vagueness, the contradictoriness, and the insufficiency of the prevailing doctrines. It preached up the necessity of following another method in appreciating the symptoms of disease, both chronic and acute: it counselled not to proceed any longer in medicine by the formation of groupes of symptoms. It shewed, in short, that nothing was less reasonable than to call a groupe of ten or twelve symptoms the *cause* of the material alterations which were found in the organs after death.

The work in question proposed to consider fevers, as inflammations are considered; to determine the seat of the latent irritation which gives rise to the febrile state—a state which is itself but an excess of irritation, caused principally by the heart; it traced fever to that latent local irritation in the viscera, as its cause, and suggested to take for the basis of the proper treatment, the influence of external agents on the *mobile* of the febrile condition, and consequently on the fever itself.

This method was eminently simple, unique, and consequently philosophical. Its novelty could not but raise a violent storm against it; but, entrenched behind an imposing mass of facts, it stood its ground, and the history of the latter periods of French medicine can give a good account of its success.

One very remarkable circumstance deserves to be mentioned. In 1812 began that work which was presented to the world as a monument of French medical science—the great *Dictionnaire des Sciences Médicales*. Up to 1817 it bore the uniform colouring of Pinel's doctrine. From that time forth it became mottled with a mixture of the principles set forth in the first *Examen*. Scarcely

is it finished, when forth comes the *Dictionnaire Abrégé*, in which those principles predominate to such a degree, that they absolutely make up the greater part of its bulk. In the great Dictionary, fevers are still *essential*; they are but symptomatic in the Dictionary abridged; and the Dictionary in 18 volumes, which comes next in order, reduces those fevers considerably, and, moreover, every where displays the banner of the doctrine which the *Examen* advocates.

[M. Broussais then proceeds to notice other works of his, and among them his recent tract on the Cholera; after which he goes on:—]

But, gentlemen, it is time to give you a summary and comprehensive view of the method we follow in the distinction and treatment of diseases, which we shall now attempt to do in the most succinct manner we are able.

This method has for its guides two phenomena which never abandon it at the bedside of the sick—motion and sensation. In fact, as long as the individual is alive, his animal substance will be affected by the influence of external agents, and hence will result, under given circumstances, certain perceptions for his consciousness. The sick man suffers; but as sure as he suffers, observation describes in his suffering organs movements different from those of the sound state! The sick man takes a remedy which does him a service—his sufferings diminish; and *vice versa*: but in the former case, his organs will be less disordered—they will more nearly approach the *normal* rhythm; while in the latter, they will tend to more and more disorder, and the disturbance will spread from the first organ to several others.

This being settled, the bases of medicine are settled also. No disease is ever in the first instance general; it always begins in some one organ, and often in a single tissue of that organ, even when it depends on a cause which has effected an alteration in the fluids—as in the case of small-pox. If, then, the practitioner make use of his senses, and find out the primitive seat of the disorder, and if especially he ascertain the exciting cause of this rising disturbance, he succeeds most usually in arresting it, and the malady is stifled in its cradle. It is thus that the new French method has reduced, in a manner truly wonderful, the number of severe fevers, or rather of those bad symptoms which are indeed now seldom met with, except where assistance has been tardily given, or where it has been entirely rejected. This is a fact well known; it is attested by all practitioners who have to deal with fever in the hospitals, civil and military. It is rare now to find among them any general or essential fevers; they are all reduced to affections simply local.

But what particularly distinguishes this

method is, that it rejects no means, how empirical or powerful soever they may appear. We do not become bound to employ only one kind of remedy, for we believe that all kinds have their proper uses; but we take pains to appreciate their effect, and to accommodate them to the susceptibility of the organs disturbed. The action of the modifiers of the constitution is our constant study, and their effects on motion and sensation, our guide in estimating their value. Whatever is injurious to the case in hand is thrown aside; but we do not reject its possible use in other cases.

Thus we have no system *à priori*, no preconceived ideas, no oath *in verba magistri*. If we have adopted for our guide the irritation and ab-irritation of the tissues, it is because we cannot by any possibility find others better.

We intreat you, gentlemen, that you will each individually reflect upon this subject, and ask yourselves how you generally judge that the prescription of your physician is or is not suited to your complaints: if you feel more fever, more agitation, less repose, and more suffering, you say to him, “your remedy, sir, does not appear to me to be suited to my case;” if you feel, on the contrary, more calm, less agitation, and less suffering, you say to him just the reverse, and express all your gratitude. Well, then, gentlemen, these modifications, which you have each of you experienced, resolve themselves ultimately into the simple facts of motion and sensation, (*le mouvement et le sentiment*) and the system which we pursue is nothing more than the interpreting their indications in maladies. But perhaps you will say, have we not had this system from the earliest times, and has it not been practised by all the sects? Common sense would suggest such a question: the truth, however, must be told—it has *not* been so. In a large number of cases it was usual to say to the sick, “have patience, it is the remedy that is operating.” In others, as in the gout, for example, the expression was, “I can give you no relief—your sufferings are necessary for nature’s purpose, and you must bear them.” In divers acute diseases, where the remedies only augmented the fever, and the other bad symptoms, in place of soothing him, the practitioner would congratulate the patient, and tell him that it was necessary to keep up the natural powers, in order to effect a salutary crisis. How often have unfortunate creatures, parching with thirst, and dying for cold drinks been obliged to gorge themselves with hot draughts, which they rejected with horror! This has been the practice, gentlemen, not very far away from you. Before the cholera reached France, it was treated in this way: it was only with the greatest difficulty, and by dint of undeniable success, that the physicians of the

north and east consented to cool their patients.

There are still many physicians who, in costive and painful states of the digestive organs, prescribe stimulants under which the stomach suffers, and who bid the patient be of good cheer, as he will be benefitted by his sufferings in the end. Others there are who have more regard for their patients' troubles, but do nothing more than change the remedy, substituting one mode of punishment for another, (always preserving the principle) but never rendering them any real relief.

No, gentlemen; the art of sparing the sufferings and tortures of patients is not so ancient as you might suppose: it is a modern art, and an art which has made but little real progress, except under the happy influence of the method which we cultivate.

This method, gentlemen, is called the *physiological*, for it observes and deals with life in the abstract, the life of the organs, and in the organs, with reference to the agents which can exercise any influence upon them.

I have now laid before you, gentlemen, the principles of the *physiological* medicine—that medicine which good sense approves, and which keeps pace with the intelligence of the age—that medicine which has necessarily been adopted by all the ablest members of the profession, and by all whom their vocation or their circumstances induce daily to come amongst us. It remains for you, the *élite* of our men of science, to extend to it your encouragement. Only deign to consider it well, and you will be convinced that here is no chimera—that it has a real existence, and is of a nature to extend itself, and to attract the regards of all men who think, and love to contemplate the advancement of all the predictions of the human mind.

BOUSSAIS.

CHOLERA TREATED BY COLD WATER*.

To the Members of the Central Board of Health, London.

GENTLEMEN,

THE perusal of Dr. Hardwicke Shute's communications induces me to transmit an account of a most severe case, successfully treated, some weeks back, almost on the same principles.

On the 6th of August, at 7 P.M. I visited a young man, *æt.* 20, who was

in the confirmed collapsed stage of cholera, attended with the following symptoms: general coldness and purplish colour of the skin, from every pore of which issued copious cold perspiration, or rather cold water. Breath and tongue cold, the latter feeling like a frog; no pulse at the wrist; cramps in almost every muscle; and the vomiting and purging of transparent fluid excessive. Urine suppressed; the countenance, if at first in any degree shrunken, became, in less than an hour, completely collapsed, and the voice decidedly a choleric whisper. On the 7th, the pulse had not returned, yet the diarrhoea was considerably checked, but an immoderate flow of urine for a short time was observed. The skin was dry, though still purplish and cold; cramps not so urgent; tongue no longer cold, slightly crusted; vomiting quite as frequent and copious. On the 8th there was some improvement; some warmth of skin, but no urine. On the 9th, a slight tinge of bile in the evacuations; no urine; pulse returned, but beating slowly. On the 10th, motions decidedly bilious, and the last feculent: skin warm; pulse better. No urine till the 11th, from which time he gradually improved, was out on the 16th, and resumed his labour on the 24th, having had scarcely any consecutive fever.

The treatment was as follows:—A mustard plaister was applied to the spine, from the occiput to the sacrum, followed by a blister spread on adhesive plaister. An enema of starch and laudanum was immediately administered, repeated in three hours, and then every twelve hours for four days; but after every loose motion, three-fourths of a pint of starch alone was thrown up the rectum. No medicine of any kind, but cold water as much and as frequently as the patient desired.

A medical friend who saw this case with me on the 11th, afterwards treated a pulseless old man, *æt.* 70, on the same plan, except giving forty drops of laudanum in chalk mixture, and speedy recovery ensued, re-action being so decided as to allow of bleeding.

I gave cold water *ad libitum* to the first patient I attended with cholera, and withdrew all stimulants; and succeeded. But many other remedies were also tried, and it was not till I lost two cases, and witnessed many deaths under other plans, that in the cold stage I adopted the simple method above de-

* For this paper we are indebted to the Central Board of Health. We take the opportunity of hinting to our contemporary, that when he received it on Monday he was not instructed to detain it till Thursday at 4 P.M.—E. G.

tailed. Experience alone can decide whether the counter-irritation be or be not essential, in addition to the cold water.

I am, gentlemen,
Your obedient servant,
JOS. B. WHITING.

King's Lynn, Sept. 2, 1832.

In premonitory cases, the astringent and opiate plan recommended to the medical practitioners of this town by my brother, Dr. Whiting, has been marked by the most decided success in arresting the progress of the disease, of which there has certainly been *three*, if not five, importations.

MEDICAL GAZETTE.

Saturday, September 8, 1832.

"Licet omnibus, licet etiam mihi, dignitatem *Ar-tis Medicæ* tueri; potestas modo veniendi in publicum sit, dicendi periculum non recuso."—CICERO.

STUDY OF ANATOMY AS AFFECTED BY THE "ACT."

WE have, on various occasions, directed the attention of our readers to the general questions involved in the Bill for regulating the supply of bodies for dissection, which was recently brought before parliament. That Bill has now become an "Act," and constitutes part of the law of the land; and as we had occasion to allude last week to the slow and gradual manner in which a knowledge of the legal enactments affecting themselves seem generally to be acquired by the members of our profession, we have devoted a considerable portion of the present number to lay before them an exact copy of the "Anatomical Act*," which has just issued from the government press; so that it will not be our fault if our brethren do not know—till taught by having some penalty to pay—that there exists in it sundry provisions touching them with which it behoves them to be espe-

cially acquainted. Those who undertake to teach anatomy have several new duties to perform; the first of which is to give notice of the place where it is their intention to practise dissection, at least one week before they begin to do so; and the second, to admit no subject without setting forth various particulars which are specified; thirdly, to enter the said particulars in a book, to be always forthcoming at the demand of the Inspector; and, lastly, to have the remains of the body decently interred—a certificate of which, by the Act, is required.

After a little time, we have no doubt but that the machinery in general will work well enough; the part most likely to produce a little jarring is the burying clause, but even with respect to that the difficulties are not insurmountable.

So much for those who undertake to teach, and who, we trust, will have no reason to complain. With respect to the student in anatomy, the case is somewhat different. That he who provides apartments for dissection should be obliged to take out a license, and should be strictly under the eye of the government, is but just and reasonable; but that the student, who is to frequent the school thus licensed, should be hampered, does not appear quite so obviously necessary; at all events, nothing should be required of him but what is easy of accomplishment. However, our object at present is rather to explain what the Act really requires, than to discuss its fitness. Pupils, therefore, ought to be aware, that, before they can take up a scalpel, they must have a license from the Secretary of State for the Home Department, to be applied for in the manner described in our last number—stating his christian and surname at length, his residence, and the school he is about to attend; all which is to be countersigned by two justices of the

* See page 749.

peace. Now all this will require some little time; and inasmuch as gentlemen, on arriving in town, have no "residence," it would be desirable for them to betake themselves to the seat of their studies a few days earlier than usual, and before the courses actually commence.

So far there is nothing to do but comply with what is required of them: but we have now to allude to a demand which we advise them most strenuously to resist—namely, that of a fee on the part of the chief clerk at the Home Office. Our attention was directed to this by the following letter:—

To the Editor of the London Medical Gazette.

London, September 1, 1832.

SIR,

There is a condition exacted by government from those who apply for a license to practise anatomy under the new Act, besides those enumerated in the Medical Gazette of this day's date, to which I should wish to direct the attention of the profession. Previous to the delivery of the license, a fee of 2*l.* 2*s.* 6*d.* is demanded by the chief clerk of the Home Office, from those whose claims to practise anatomy have been approved of by his superior. Should such fee not be forthcoming, the license is, for the present, withheld. This "tax upon knowledge," as a teacher of anatomy, and in the interest of my pupils, I have felt it my duty to resist. No precedent can be pleaded in its favour—it is not in any way authorized by the Act—in principle it is illiberal—and to the student of anatomy, subjected as he is by the new statute to the same restrictions and penalties with his teacher, it might be rendered exceedingly oppressive. Should I find, on further application to the Home Office, that this fee is still insisted on, I shall again bring the subject under your notice.

I am, sir,

Your obedient servant,

A PHYSICIAN.

We have carefully perused the Act, and find, with our correspondent, that nothing of any such sum to be paid for

the license is therein mentioned. "It is not in the bond;" and as it is obviously a very heavy and disproportionate demand, we hope to see it effectually resisted. We do not believe that it is legal to refuse the license to those who decline paying a price for it of which no specification is made, and we feel satisfied that when it becomes known in the proper quarter, and is considered how heavy a tax it would prove to many, the grievance will be immediately abated, if not entirely removed. It is quite clear that the license should be easily obtained, and liberally granted, but that all offence to the public, bringing scandal on anatomy, should be prevented.

With regard to the duties of the Inspector, it is only necessary for the teachers and students to keep in mind that he is bound to see the provisions of the Act fulfilled, and that he shall personally visit the schools from time to time. It is satisfactory to perceive that gentlemen have been appointed who are intimately acquainted with the details of the dissecting-room, and the general circumstances of the case, and who otherwise are not likely to give any trouble which can with propriety be avoided;—a fussy inspector might make himself an intolerable nuisance.

SIR EVERARD HOME.

SIR EVERARD HOME died at Chelsea on Friday last, the 31st ultimo, in the 77th year of his age. Sir Everard was of Scotch extraction, and his connexion with the Hunters brought him into notice at an early period. At one time he enjoyed high consideration, and the more substantial advantage of an extensive practice. He had the good fortune to be appointed one of the surgeons to St. George's Hospital, which, added to various works which attained a considerable degree of celebrity, contri-

buted to extend his reputation, the advantages of which he lived nearly half a century to enjoy. Sir Everard Home was the author of Practical Observations on Stricture, of Lectures on Comparative Anatomy, and of various papers in the Philosophical Transactions. In 1813 he was created a baronet by his late Majesty: he was also sergeant-surgeon to the king, and surgeon to Chelsea Hospital. For several years before his death, Sir Everard had retired from public life, and we believe that his habits, together with his advanced years, had led to considerable bodily infirmity.

—

PUBLIC HEALTH IN LONDON.

RATHER a remarkable variation has occurred in the mortality of the metropolis during the past fortnight; and it seems to have been connected, or at all events was simultaneous, with a sudden and considerable change in the atmospheric pressure. On Tuesday the 28th ultimo the barometer had fallen to 29·18, being lower than at any time since February; and the period of seven days gave an increase in the number of deaths within the Bills of Mortality, as compared to the preceding week, of 477. Since the 28th the barometer has been gradually recovering its former elevation, and on Tuesday last reached 30·21;—the Bills of Mortality up to which day give a decrease in the number of deaths of not less than 497. We are happy in being able to add, that among these the diminution in cholera is from 274 to 157. This cannot, it is true, be regarded as the total number of deaths by cholera, but we are enabled to state, that taking the whole metropolis, the disease has undergone no increase during the week just concluded.

—

ANTI-CHOLERA BRANDY.

ADVERTISEMENTS are constantly appearing in which various nostrums for cholera are recommended, and among others we have anti-cholera brandy. We have been led to make some inquiries on the subject, which have satisfied us that brandy, either neat, or variously prepared and disguised, is very extensively used—and by those, too, who might have been expected to know better—as an antidote to the present epidemic. It is impossible to calculate the mischief which accrues from this most pernicious practice, and we earnestly intreat our readers to use their influence in counteracting it. Among the few points connected with cholera about which the intelligent part of the profession in this country are agreed, we may state one to be that the method of treatment by stimulants, however plausible in theory, has *totally failed in practice*. In fact, the opposite principles, of regarding the vomiting and purging as a sanatory effort on the part of the system to relieve itself of the poison, and the necessity in the low state of vitality to which the patient is reduced of avoiding overstimulation, as we would shun the fire in a case of frost-bite, are daily gaining ground. Let the bowels be freed by a moderate purgative at the beginning, and let brandy, laudanum, and every thing analogous, be laid aside, either in the prevention or cure of cholera, except in very minute quantities, and under particular circumstances, and the probability is, that the rate of mortality will be greatly diminished. At all events let the dram bottle, rendered yet more poisonous by spices and other fiery additions, be forthwith discarded, by all those who are not tired of their lives.

—

SURGEON TO CHELSEA HOSPITAL.
THE valuable appointment of surgeon to Chelsea Hospital, which was held by Sir Everard Home, is to be conferred on Mr. Keate.

SERGEANT-SURGEON.

WE understand that Mr. Brodie is to be Serjeant-Surgeon to the King, in the room of Sir E. Home. It is said that his late Majesty had made this appointment a matter of special request to his royal brother, then Duke of Clarence, when it was all but certain that he would be his immediate successor to the crown.

ENERVATION PRODUCTIVE OF CHOLERA.

DR. LEGROS, of Paris, has published a note, in which he urges strongly the fact of *any* kind of nervous debility rendering the system peculiarly exposed to an attack of cholera. It is, however, to one source of exhaustion that he particularly alludes. The same observation has, indeed, been made by others; but as it has not been sufficiently impressed upon the public, we think it right to bring it more pointedly under the notice of our readers. A case will render farther explanation unnecessary. A young man of twenty-seven, when on the point of marriage, was seized with cholera: his illness was severe, and his convalescence slow; however, having regained his health to a considerable extent, he would consent to delay his happiness no longer. He was married; and, at four o'clock next morning, was attacked with cholera, having had no premonitory symptoms, and died in seven hours, notwithstanding the most diligent employment of remedial means. Again, an old general left his house in good health, and was brought back in a dying state in two hours afterwards. What follows will read best in the original:—

“Interrogé sur ce qui avait précédé son indisposition, il nous apprit qu’il était bien le matin, qu’il n’avait pas de dévoiement, que cependant depuis environ trois mois, il suait plus souvent, plus abondamment et non plus de facilité que de coutume, puis, après beaucoup de tergiversations, il avoua qu’il était allé avec une femme, et que c’était pendant de vains efforts pour exercer le coït, qu’il avait été pris de tremblemens de sueurs froides et de vomissemens.”

He died in the course of a few hours,

having neither purging nor cramps; but with severe vomiting and mortal collapse. It is in the case of convalescents and elderly persons that the attack, under the circumstances alluded to, has been chiefly met with.

CASES OF HERNIA,

Occurring at the Middlesex Hospital; with Clinical Observations,

BY SIR CHARLES BELL.

GENTLEMEN,—In the present and the preceding month you have witnessed the operation for hernia performed five times. As the occasion of doing your duty in these cases comes unexpectedly upon you, and especially requires decision, I am very desirous that you should not lose the advantages of these examples, but that, by mature reflection upon them now, you should be prepared, when it becomes your duty, to act with promptitude. It is one benefit of clinical instruction, that, by conversing with you as we pass round the wards, I learn on what to dwell when we are met here. I think I have observed that you mistake very much the importance of tobacco injections. That practice has arisen in a physiological error, and is, I am of opinion, wrong in every view we take of it. The effect desired to be accomplished through it, is to produce debility, with the view of removing “spasm” from the stricture, and to withdraw the intestine by exciting the action of the bowels within. Now, before I proceed to my argument, I must acknowledge that the highest authorities in the profession, both now and heretofore, are in favour of the practice; which will make you weigh my opinions and yield only to conviction. In the first place, there is no such thing as spasm in the neck of a hernial sac. When you perform the operation with the knife, it is not muscle which you cut, and therefore it is not muscle which prevents the reduction of the bowel. As to exciting the action of the intestines within, you must observe that there is just as much danger to be apprehended from this practice as from too great pressure applied from without. If you have attended to the condition of an incarcerated and strangulated gut, you will know that there is a

portion of the intestinal canal which is in danger from the sharp edge of the stricture pressing upon its reflected angle, and that there are these various causes of failure in hernia*:—1st. Abdominal inflammation, excited by the writhing and distention of the intestines above the strictured part. 2dly. Mortification of the intestines within the sac. 3dly. Rupture or ulceration of the gut opposite to the line of the stricture. All of these, but particularly the last, are sufficient reasons against augmenting the violent excitement of the bowel within.

Experience convinces me more and more, that the surgeon's practice in hernia must be determined, not by symptoms, but, after having ascertained that the distress of the patient does arise from hernia, by the touch—that is, by feeling the roundness, the fulness and hardness of the tumor, and the narrowness or *pinch* of the neck. You have here the reports of four operations performed in succession, and all attended with success. Now in each of these it was a small portion of the intestine that was down, and the stricture was, in all the cases, very close; in short, after the surgeon's duty was performed, and the state of the parts ascertained, the opinion was universal, that nothing could have succeeded in reducing the intestines except the edge of the knife. Happily the patients were sent into the hospital early, without violence having been done by the taxis, and there was no delay in performing the operation after they were received. But, unfortunately, it often happens thus: the patient is conveyed to the hospital after a surgeon has done his best out of the house; the house-surgeon makes his attempts, is unsuccessful, and sends for the surgeon of the week; he next examines the tumor, attempts reduction, then orders a large bleeding, the warm-bath, stimulating clysters, and a consultation to be called. Now, with all this, there is too much delay. I hold it to be the duty of the surgeon to make his attempt to reduce the hernia with patience, gentleness, and perseverance: during this time, if he be an intelligent practitioner, and his experience be grounded on the anatomy, he will be better able to determine upon the propriety or the necessity of operating than twenty sur-

geons standing round the patient's bed, observant merely of the symptoms. And here is the advantage of character in an institution like this—that the patient does not object to the operation, or delay giving his assent, after the opinion of the surgeon has been declared.

To return to the subject of tobacco injections. One advantage I certainly see in that practice: it makes the patient very sick, and low and cold, and he and his relations acquiesce readily in the surgeon's decision, seeing that there is all the appearance of approaching death. Nor must we omit to observe, that death has, on many occasions, been the consequence of the use of tobacco. The tobacco smoke is exceedingly unmanageable; sometimes producing no effect, but sometimes unexpectedly bringing on lowness of pulse, fainting, cold sweats, sickness, and tossing and anxiety. In regard to the tobacco infusion, you will find that our authorities differ very much as to the quantity that is proper. Sir Astley Cooper has seen one drachm, in infusion, prove fatal; while others employ two drachms, or even more, in decoction. But my grand objection to the use of tobacco is the procrastination, and the admission that there are any means to be trusted to, compared with the taxis, or any thing to be done when that fails but the operation with the knife.

I must remind you, however, that in hernia, and especially in large herniæ, there is sometimes an opposition to reduction from the condition of the bowels within the abdomen. It is in such cases that the apothecary's practice—clysters and purgatives—may be of advantage: but when there is a small hard knob in the groin, let nothing come in competition with the surgeon's hand.

But let us proceed to our cases.

Femoral Hernia.

CASE I.—A. D., 64 years of age, mother of nine children, was admitted into Bird's Ward, on the afternoon of July 5th, with symptoms of strangulated hernia. A swelling was found in each groin; that in the right large, soft, of irregular form, yielding to the pressure of the hand with a croaking noise, but not entirely disappearing, and receiving a great impulse on coughing; that of the left side, the size of a large walnut, tense, incompressible, and receiving no impulse

* See a Clinical Lecture on Hernia, by Sir C. Bell, in Med. Gaz. vol. iii. page 104.

from coughing.—(No. I.) Neither swelling was painful: the first mentioned had existed for fourteen or fifteen years, she thinks it has never gone entirely up, and she has not suffered inconvenience from it: the last first showed itself seven years ago when she was making some exertion, and has occasionally come down, but never until now having been more than an hour and a half down, but going up on pressure, and sometimes not re-appearing for four or five weeks. Last night the swelling in the left groin reappeared while she was ironing, and as usual when it descended she was attacked with sickness and vomiting, which, as she did not succeed in reducing it, continued during the night: this forenoon she sent for a surgeon, who ordered her to come to the hospital.

For three hours subsequent to her admission she had no symptoms; then she was attacked with vomiting, and soon after began to complain of pain in the belly. The taxis being tried without effect, twenty ounces of blood were taken from the arm; and the reduction being again attempted without success, the operation was resorted to, twenty-nine hours after the descent of the rupture.—(No. II.) The sac contained a little reddish serum, a portion of omentum, and underneath this a piece of bowel, the size of a large cherry, of a dark red, almost chocolate colour.—(No. III.) The stricture being divided, the gut and part of the omentum were returned. Immediately after the operation, a large enema of warm water was given, and two hours subsequently, ten ounces of blood were taken from the arm. Early in the following morning, the patient began to take small doses of sulphate of magnesia, and at noon she had seven grains of extract of colocynth, two of calomel, and three of extract of conium, in pill, which produced free evacuation from the bowels. In the evening, twenty leeches were applied to the abdomen. From this time, with the exception of some pain she one day experienced from an error in diet, and which yielded to one application of leeches and a dose of castor oil, she had not an unfavourable symptom.

(No. I.)—I shall not detain you long here, but just remind you that you have, in this description, the distinctions marked which have been, rather incorrectly, called chronic and acute hernia. You see at once, that what is called the acute hernia results entirely from a mechanical cause: it is a small, round, hard tumor, which receives no impulse from within, owing to the closeness of the stricture; and you distinguish it from the large lax tumor, with an open or wide neck, through which the abdominal impulse is conveyed.

(No. II.)—"Twenty-nine hours after the descent of the rupture."—Gentlemen, you must put no value upon this fact; it informs you of nothing. The mischief may be done in an hour as well as in nineteen hours. The lesson you receive is, that there must be no delay after the proper means have been tried to reduce the tumor.

(No. III.)—This small cherry-like portion of intestine marks the condition of the greatest danger in hernia. After the constriction of the veins has produced this dark colour, secretion into the interior of the gut and effusion between the coats come on very rapidly, complete the strangulation, and mortification must immediately follow.

Inguinal Hernia.

CASE II.—James Turner, æt. 50: August 1, 1832. He has been subject to hernia for many years, but has always been able to return it when it came down: he has generally worn a truss, but latterly has not, on account of the spring being broken.—(No. IV.) The rupture came down yesterday afternoon, since which he has not been able to return it. He was admitted into the hospital at twelve o'clock this morning, previously to which he had seen some medical man, who tried the taxis two or three times, but without avail. The tumor was acutely painful, so that very little time was spent in trying the taxis: he said he had vomited frequently before he came to the hospital, but did not do so afterwards. His bowels had not been open since the rupture came down. There was pain in the abdomen, in the region above the hernia. A consultation was called, and the operation decided upon, and was immediately performed. An incision was made over the tumor, about three inches in length; and, after some dissection, the sac was laid open: it was found to contain a large quantity of fluid; some also came from within the abdomen.—(No. V.) The portion of intestine that had descended was about six inches in length, and of very good colour. The stricture was remarkably small: it was divided upwards, and inclining rather outwards. One circumstance not attending the operation in general was, the acute pain which this patient suffered during the whole operation: dividing the different layers of membrane gave severe pain, as also did the division of the stricture. There was no omentum in the sac. The edges of the skin were brought together by two sutures, and a compress and bandage applied.—(No. VI.) A large enema of warm water and gruel was administered, which returned mixed with faecal matter. The bowels were twice open afterwards. He also took a calomel and

opium pill every six hours; and a drink of barley water, Epsom salts, and lemon juice. Towards evening there appeared to be more pain in the belly, above the hernia, for which twenty leeches were applied, which relieved him.

2d.—He passed a good night; the pulse was 64, and it has not risen since the operation; the bowels have been open four times to-day; the tongue is white, but quite moist. Towards evening, his pulse had increased greatly in strength, though not in velocity; there was also a jerk in it; he was bled to 3xx. after which it became soft and quite compressible. He complains of more thirst than he did.

3d.—His pulse has remained quiet since the bleeding; the tongue is moist; the bowels have been freely open to day; in the morning there was a slight increase of pain in the abdomen, above the hernia. This was relieved by the application of sixteen leeches. The wound was dressed to-day; there was a good deal of swelling and induration about the edges, extending down the spermatic cord.

4th.—There is no increase of pain in the abdomen; his pulse remains quite soft, and tongue moist. The bowels have not acted very freely, and he had a dose of castor oil, after which they were properly opened. He did not sleep very well last night, so he had *Opii mxx. Aq. Ment. Pip. ʒiiss.*

5th.—He did not sleep well. This morning he has more uneasiness in the wound; he has no pain in the abdomen; the pulse is quite soft; his bowels are freely open. The dressings were discontinued, and a linseed poultice was applied to the wound.

6th.—He is doing quite well. There is no pain in the abdomen; his bowels are freely open; the wound looks better.

After this he had not a bad symptom. The wound continued healing daily, and by the 24th had completely cicatrized.

(No. IV.)—You will remember that a person who has worn a truss, to the effect of nearly closing the ring, comes into a condition of great danger when the gut does descend. There is a narrowness of the passage, and a sharpness of the edge of the stricture, which gives to the accidental descent of the intestine all the characters of the "acute" hernia.

(No. V.)—Your prognosis will be very much directed by this secretion. A certain quantity of serous effusion is a necessary consequence of incarceration; and when this is limpid, it is favourable. But we must distinguish the effusion into the sac from the serum which flows from the abdominal cavity after the reduction of the intestine.

The latter implies that the viscera within the abdomen have suffered high excitement, and when it is in large quantity it is a very unfavourable symptom. A case occurred during the summer, which no doubt you recollect, in a woman: when the finger was withdrawn, after reducing the intestine, the serum flowed as water from a cask. She died, and yet the intestine within the sac promised a favourable result. I remember a gentleman standing by, saying, "Well, if that intestine does not recover, I do not know when we are to expect success;" and I then pointed out to him the quantity of serum, as the very worst symptom.

(No. VI.)—As to this pain from the cutting of tendinous parts, we cannot depend much on the expression of the patient. He certainly complained a great deal during the operation, but he was as remarkably merry after it. I do not remember to have seen a patient operated on, who was in actual danger, as this man was, of forcing all down again by a hearty fit of laughing.

Femoral Hernia.

CASE III.—S. B., 29 years of age, walked into the hospital on the afternoon of Sunday, August 12th, complaining of having had severe sickness and vomiting the two preceding days. Admitted by the apothecary into one of the physician's wards; that gentleman, on investigating her case, detected a small swelling in the right groin; and suspecting that this might have some connexion with her complaints, he requested the surgeon of the week to see her. From her statement it appeared that she had noticed a small kernel in the situation just mentioned, for the last three years; that, on the afternoon of Friday last, whilst she was occupied in her avocations as housemaid, she felt it get larger, and that soon afterwards she was attacked with severe twinging pain in the belly. A calomel pill, and some gruel which she took, were rejected by vomiting. In the course of the night she had a scanty scybalous motion. On the morning of Saturday some pills and a draught were administered, but not retained; and some castor oil, taken at six in the evening, had the same fate. Since then she has not vomited nor had sickness; her countenance is good, and betrays no suffering, and her pulse is natural. On examining the swelling, it was found to be little larger than a hazel nut, firm and unyielding, and receiving no impulse on coughing; free from tenderness, but occupying precisely the situation of femoral hernia; there was no pain or tension of the abdomen. The taxis being tried with-

out avail, a large clyster was administered, and another attempt made to reduce the swelling, but with as little success. Although, therefore, no urgent symptoms existed, it was now resolved to operate, from the circumstances revealed in the history of the case.

On reaching the hernial bag, or fascia propria, this was so small in size, and some blood-vessels were so distinctly ramified upon it, as to occasion a doubt if it was not the bowel. (No. VII.) On opening the peritoneal sac a little bloody serum was evacuated, and then there was perceived a portion of bowel, not larger than the tip of the finger, of literally a black colour. The stricture was very tight, and on its being divided, about a couple of ounces of serum flowed from the cavity of the abdomen. The piece of gut was now returned within the abdomen, but it did not recede from the ring, being retained there by adhesions all round, which were not disturbed. A compress and bandage were put over the parts in the usual way, it being determined, however, that if clear evidence of mortification should take place, these should be removed, and the bowel probably opened. As this, however, had not taken place, and as very violent inflammation existed, blood was taken from the arm immediately on the patient being replaced in bed; and as the pulse rose under this, twenty ounces were allowed to flow. A large clyster of warm water was ordered forthwith, and two grains of calomel every two hours. Five hours after the operation, the countenance for the first time showed some anxiety; twelve ounces of blood were taken from the arm, and some extract of colocynth, with calomel and conium, in pills, ordered.

In the morning of the 13th the bowels had not been acted upon; the belly was soft, and free from pain; yet, as there was some sharpness of pulse, ten ounces of blood were taken by venesection, and fifteen leeches applied to the abdomen. The colocynth pills were repeated, and again at 2 p.m. At 6, half an ounce of castor oil was given, which at 10 o'clock—that is, 30 hours after the operation—produced the first motion from the bowels. Copious evacuations followed. The case proceeded favourably; but on the morning of the 17th the lint covering the wound was observed to be tinged yellow, and on removing this, a small quantity of a similar coloured fluid was seen to come from the wound. Firm pressure was made upon the aperture by a compress and roller; half an ounce of castor oil was taken, and a large enema given. If any severe griping succeeded the exhibition of the castor oil, the compress was directed to be removed; but this was not called for; the patient had a free evacuation per anum.

On the 18th bilious fluid in increased quantity had flowed from the wound, owing

in a great measure to the compress having shifted, and the difficulty of applying pressure by means of a roller. To remedy this, and as there was evidently a free passage in the natural course of the intestinal canal, a truss was applied over the compress, and by this means the discharge of bilious matter from the wound was effectually prevented. The truss was continued until the 26th, the bowels acting freely per anum on the exhibition of castor oil; when, owing to some redness and vesication of the integuments, it was left off, and large poultices applied over the wound. The discharges of bilious matter now recurred, and in considerable quantity; but in a day or two this subsided, and under the chalk dressing the integuments have assumed a healthy character. The sore is now granulating, healing, and contracting; there is still some weeping of a bilious fluid, small in quantity, and increased upon the taking an aperient, which is requisite to get the bowels to act per anum. (No. VIII.)

(No. VII.)—You will remember that the anatomy of hernia cannot be completely studied by the dissection of the natural parts. The true sac assumes a very different appearance in the varieties of hernia. We have no time to enter fully upon this subject; yet I must remind you that the peritoneal sac of the femoral hernia of women is so exceedingly thin, and the colour of the intestine shines so distinctly through it, that you are very apt to mistake it for the intestine, and to reduce it along with the gut. The circumstance noticed in this case, of the resemblance of the fascia to the bowel, strengthens the same misapprehension. You distinguish the sac by the mode in which the vessels run upon it; and taking the tumor betwixt the finger and thumb, you can discover that it contains a fluid, and that in that fluid there is a nucleus. The dissection, however, is a very nice one.

(No. VIII.)—Of the five cases which are read to you, this is by far the most interesting. I mentioned three sources of danger; and that where there was a small portion of intestine and a narrow stricture, the coats were apt to be partially cut, and afterwards to ulcerate. You see that, in this case, the general disturbance or injury to the intestinal canal within the abdomen, did not bear a proportion to the injury of the portion included in the hernia; and you accordingly observe that recovery is almost certain. You will especially mark, that when the intestine within the sac is

thus exposed to ulceration and mortification, it does not lie loose; for, as inflammation accompanies the injury, it is agglutinated by coagulable lymph to the peritoneum behind the stricture. You ought not to undo this adhesion; and, on the whole, the practice here pursued by Mr. Arnott I conceive to be just what you ought to follow. You will observe that there has not been a sloughing of the intestine, but an ulceration where it was pinched; and you will do well to mark this distinction when feculent matter is discharged after hernia.

I am inclined to believe, that in this case the whole diameter of the gut was not included in the stricture. If so, this is a very favourable circumstance, and will facilitate the process of cure, and lead us to hope that there will be here no anus at the groin. This is a subject which we shall take up at more leisure.

Femoral Hernia.

CASE IV.—Rebecca Meeking was admitted July 12th, at 7 o'clock in the evening. She stated that at six o'clock this morning she was seized with vomiting and pains in the bowels, when her attention was directed to a tumor in the right groin, which she says she had not observed before. She was visited shortly after by some medical man, who found that she had rupture, and endeavoured to reduce it, but without success; he also tried again this evening, but could not succeed. He then advised her to be brought to the hospital. On her admission there was found to be a femoral hernia of the right side; the tumor was about the size of a walnut. One portion of it was soft and lay over Poupart's ligament, and could be easily brought down; there was another portion much harder, situated to the inside, and below the ligament. This portion was irregular, while the other felt smooth and even. She says that she has vomited frequently during the day. The bowels were open yesterday, but not to-day. The tumor is now very painful on pressure, and offers great resistance, all attempts to reduce it proving ineffectual. There is no pain in the abdomen; the pulse is small and weak. She had an enema, part of which returned immediately, and the remainder came away about half an hour afterwards, mixed with hardened feces.

The surgeon of the week came to the hospital about 10 o'clock, and tried for a short time to reduce the hernia, but could not make any impression on it; it was accordingly found necessary to operate. An incision was made to the extent of about two inches over the tumor. The irregular mass

felt through the skin was now exposed, which proved to be fat, and two or three small glands. About the centre there was seen to be a large vein, running up under the skin of the abdomen; this was carefully avoided. (No. IX.) After a little dissection the sac was exposed, which appeared very thin, being quite transparent; it was opened, and found to contain about 3ss. of fluid. The portion of intestine was now exposed, and about the size of a large hazel nut; it was in a very good condition, though of a darker colour than natural, not having lost its shining appearance. The stricture was divided upwards and inwards, and the intestine easily returned; no omentum was contained in the sac.

The edges of the incision were brought together with adhesive plaister, and a compress and bandage applied. An enema of warm water and gruel was given, and 3xiv. of blood taken from the arm.

13th.—She has not vomited since the operation; she got some sleep during the night; her bowels have been open once this morning; she had pain in the lower part of the abdomen, which was relieved by the application of leeches; she was ordered to take a calomel and opium pill every six hours, and a mixture containing castor oil. In the evening there was an increase of pain, and she had nine leeches applied, after which she was relieved.

16th.—She has gone on quite favourably since last report; the bowels have been open daily by taking small doses of castor oil.

After this her improvement was rapid, and she had not a bad symptom. The wound required to be poulticed for about a week, after which it was dressed, and gradually healed. She was discharged from the hospital August 14th. (No. X.)

(No. IX.)—The greatest advantage of experience in a lecturer, is when he recollects what were the things that puzzled him in his early practice. In just such a case as this was my first operation performed. I well remember the difficulty I had in distinguishing the sac, and opening it. The femoral hernia, as I have had frequent occasion to observe to you, is generally very small: and over it lie the glands of the groin, with much fat, and sometimes, indeed not unfrequently, there are sacs, containing fluids, or sort of hydatid tumors, making the mass altogether very irregular. I have just observed that the layers covering the peritoneum are very smooth, and very like the proper sac; so that this forms a piece of dissection which requires some dexterity, together with a perfect knowledge of

the distinct characters belonging to the parts. You lay the glands aside, in such a manner as to make it unnecessary to divide the lymphatics of the thigh. The wounding of the vein, here spoken of, is of no consequence, further than that by covering the surfaces with blood, it may make the necessary dissection a little more difficult.

(No. X.)—The only further observation that I will make on this case, is in regard to the direction of the bistoury in cutting the stricture. It may have appeared to the by-standers that the cut was made obliquely upwards and inwards; but certainly the surgeon's intention was to cut directly upwards. In these small herniæ, it is of very little moment; for all you have to divide is just the sharp edge of that tendinous arch which stretches across the upper part of the neck of the sac: and you would do well to observe with what intention this is done; which will afford you a measure of the extent of your incision. In such cases, you do not think of forcing in the point of your finger; but only the directory. Then passing the straight bistoury (which you see is blunt to half an inch from the point, and cuts only at one small part of its edge,) you raise the hand, separating the instruments; and you do not draw the bistoury, as in common cutting, but raise it like a lever, the point resting on the groove of the directory. By this means, you cut only what strongly resists; that is, the firm edge of the ligament, and, of course, a small portion of the neck of the sac. Now, when this is done, you are not at once to push up the intestine; but rather draw it a little down, and compress it, and empty it; and always be very careful in the mode of reducing it, avoiding, as the most dangerous practice, the thrusting in of the finger into the stricture, whilst the tender part of the gut remains in its original place.

Direct Inguinal Hernia.

CASE V.—On the 14th of July, at the hour of visit, the attention of the surgeon was called to the case of a man between fifty and sixty years of age, who for the last two days had had bilious, and now stercoraceous vomiting, and from whose bowels there had been no evacuation per anum for a week. He had for years had a rupture in each groin. The hernial tumor of the right side was found to be large, soft, and in its contents were felt formed faeces. With some difficulty it could be entirely reduced, de-

scending again immediately on the pressure being withdrawn; that of the left side was about the size of a hen's egg, tense, but yielding in some measure to pressure, which was attended with a gurgling noise; but the swelling could not be reduced. The skin over the latter was reddened, the abdomen was distended, and the skin cold and clammy. It was feared mortification of the contents of the left hernial sac had taken place; and on getting into the sac, this was found to be the case with a portion of bowel which it contained. The stricture, which was not tight, was divided directly upwards, the bowel was opened, and the edges of the incision in it attached by ligature to those of the skin. A free and copious discharge of the contents of the intestinal canal immediately took place, the tension of the abdomen subsided, but the patient survived only 30 hours.

On examination of the body, extensive inflammation of the peritoneum, with effusion of lymph, was found to have existed. The hernia operated upon was discovered to have been a direct one, passing immediately from the belly through the external ring. The epigastric artery passed upwards, on the outside of the neck of the sac; and again, on the outside of this vessel, was seen the internal ring dilated, and with a pouch of peritoneum propelled a little way through the inguinal canal; so that, if the man had lived, it seemed as if he might have had a hernia passing in the usual way through this canal, in addition to the direct one operated upon, the epigastric artery passing up between the openings of the two sacs.

The hernial tumor of the right side was formed principally of the caput cæcum; it was not included in a sac; and although a sac did exist, this lay on the anterior part of the bowel only, and contained nothing. The posterior and inferior parts of the gut were covered by loose cellular substance. The intestine contained in the direct hernia of the left side, had been the lower part of the ilium, close to the cæcum.

This case shewed the advantage of the rule of operating in inguinal hernia, by dividing the stricture directly upwards, which had been done in this case, and yet the incision had not touched the epigastric artery. (No. XI.)

(No. XI.)—We have been observing that the incision of the stricture should be made directly upwards. In this hernia (the bubonocèle) there is an additional reason for this practice, since it is not always clear whether the case be one of direct or oblique hernia: and you have had here demonstrated that in the one the artery lies on the outside, and in the other on the inside; while in both, it is close upon the neck of the

sac; so that if, in the direct hernia, the surgeon had cut obliquely upwards and outwards, the artery would have been in danger: and the same danger would have been incurred if, in the other, he had cut obliquely upwards and inwards. Thus you have the reason of the rule to cut directly upwards in every case.

During the ensuing season, we shall have frequent occasion to resume this subject of Hernia.

AN ACT FOR REGULATING SCHOOLS OF ANATOMY;

Being the 2d and 3d of William IV. cap. lxxv.

WHEREAS a knowledge of the causes and nature of sundry diseases which affect the body, and of the best methods of treating and curing such diseases, and of healing and repairing divers wounds and injuries to which the human frame is liable, cannot be acquired without the aid of anatomical examination: and whereas the legal supply of human bodies for such anatomical examination is insufficient fully to provide the means of such knowledge: and whereas, in order further to supply human bodies for such purposes, divers great and grievous crimes have been committed, and lately murder, for the single object of selling for such purposes the bodies of the persons so murdered: and whereas therefore it is highly expedient to give protection, under certain regulations, to the study and practice of anatomy, and to prevent, as far as may be, such great and grievous crimes and murder as aforesaid; be it therefore enacted by the King's Most Excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present parliament assembled, and by the authority of the same, that it shall be lawful for his Majesty's principal secretary of state, for the time being, for the home department in that part of the United Kingdom called Great Britain, and for the chief secretary for Ireland in that part of the United Kingdom called Ireland, immediately on the passing of this act, or so soon thereafter as may be required, to grant a license to practise Anatomy to any fellow or member of any college of physicians or surgeons, or to any graduate or licentiate in medicine, or to any person lawfully qualified to practise medicine in any part of the United Kingdom, or to any professor or teacher of Anatomy, medicine, or surgery, or to any student attending any school of Anatomy, on application from such party for such purpose, countersigned by two of his Majesty's justices of the peace acting for the county, city, borough, or place wherein such party resides, certifying that, to their knowledge or

belief, such party so applying is about to carry on the practice of Anatomy.

II. And be it enacted, that it shall be lawful for his Majesty's said principal secretary of state, or chief secretary, as the case may be, immediately on the passing of this act, or as soon thereafter as may be necessary, to appoint respectively not fewer than three persons to be inspectors of places where Anatomy is carried on, and at any time after such first appointment, to appoint, if they shall see fit, one or more other person or persons to be an inspector or inspectors as aforesaid; and every such inspector shall continue in office for one year, or until he be removed by the said secretary of state or chief secretary, as the case may be, or until some other person shall be appointed in his place; and as often as any inspector appointed as aforesaid shall die, or shall be removed from his said office, or shall refuse or become unable to act, it shall be lawful for the said secretary of state or chief secretary, as the case may be, to appoint another person to be inspector in his room.

III. And be it enacted, that it shall be lawful for the said secretary of state or chief secretary, as the case may be, to direct what district of town or country, or of both, and what places where Anatomy is carried on, situate within such district, every such inspector shall be appointed to superintend, and in what manner every such inspector shall transact the duties of his office.

IV. And be it enacted, that every inspector to be appointed by virtue of this act shall make a quarterly return to the said secretary of state or chief secretary, as the case may be, of every deceased person's body that during the preceding quarter has been removed for anatomical examination to every separate place in his district where Anatomy is carried on, distinguishing the sex, and, as far as is known at the time, the name and age of each person whose body was so removed as aforesaid.

V. And be it enacted, that it shall be lawful for every such inspector to visit and inspect, at any time, any place within his district, notice of which place has been given, as is hereinafter directed, that it is intended there to practise Anatomy.

VI. And be it enacted, that it shall be lawful for his Majesty to grant to every such inspector such an annual salary, not exceeding one hundred pounds, for his trouble, and to allow such a sum of money for the expenses of his office as may appear reasonable; such salaries and allowances to be charged on the consolidated fund of the United Kingdom, and to be payable quarterly; and that an annual return of all such salaries and allowances shall be made to parliament.

VII. And be it enacted, that it shall be lawful for any executor or other party having lawful possession of the body of any de-

ceased person, and not being an undertaker or other party intrested with the body for the purpose only of interment, to permit the body of such deceased person to undergo anatomical examination, unless to the knowledge of such executor or other party, such person shall have expressed his desire, either in writing at any time during his life, or verbally in the presence of two or more witnesses during the illness whereof he died, that his body after death might not undergo such examination, or unless the surviving husband or wife, or any known relative of the deceased person, shall require the body to be interred without such examination.

VIII. And be it enacted, that if any person, either in writing at any time during his life, or verbally in the presence of two or more witnesses during the illness whereof he died, shall direct that his body after death be examined anatomically, or shall nominate any party by this act authorized to examine bodies anatomically to make such examination, and if, before the burial of the body of such person, such direction or nomination shall be made known to the party having lawful possession of the dead body, then such last-mentioned party shall direct such examination to be made, and, in case of any such nomination as aforesaid, shall request and permit any party so authorized and nominated as aforesaid to make such examination, unless the deceased person's surviving husband or wife, or nearest known relative, or any one or more of such person's nearest known relatives, being of kin in the same degree, shall require the body to be interred without such examination.

IX. Provided always, and be it enacted, that in no case shall the body of any person be removed for anatomical examination from any place where such person may have died, until after forty-eight hours from the time of such person's decease, nor until after twenty-four hours notice, to be reckoned from the time of such decease, to the inspector of the district, of the intended removal of the body, or, if no such inspector have been appointed, to some physician, surgeon, or apothecary residing at or near the place of death, nor unless a certificate stating in what manner such person came by his death shall previously to the removal of the body have been signed by the physician, surgeon, or apothecary who attended such person during the illness whereof he died, or if no such medical man attended such person during such illness, then by some physician, surgeon, or apothecary who shall be called in after the death of such person to view his body, and who shall state the manner or cause of death according to the best of his knowledge and belief, but who shall not be concerned in examining the body after removal; and that in case of such removal, such certificate shall be delivered, together with the body, to the party receiving the same for anatomical examination.

X. And be it enacted, that it shall be lawful for any member or fellow of any college of physicians or surgeons, or any graduate or licentiate in medicine, or any person lawfully qualified to practise medicine in any part of the United Kingdom, or any professor, teacher, or student of anatomy, medicine, or surgery, having a license from his Majesty's principal secretary of state, or chief secretary as aforesaid, to receive or possess for anatomical examination, or to examine anatomically, the body of any person deceased, if permitted or directed so to do by a party who had at the time of giving such permission or direction lawful possession of the body, and who had power, in pursuance of the provisions of this act, to permit or cause the body to be so examined, and provided such certificate as aforesaid were delivered by such party together with the body.

XI. And be it enacted, that every party so receiving a body for anatomical examination after removal shall demand and receive, together with the body, a certificate as aforesaid, and shall, within twenty-four hours next after such removal, transmit to the inspector of the district such certificate, and also a return stating at what day and hour and from whom the body was received, the date and place of death, the sex, and (as far as is known at the time) the christian and surname, age, and last place of abode of such person, or if no such inspector have been appointed, to some physician, surgeon, or apothecary residing at or near the place to which the body is removed, and shall enter or cause to be entered the aforesaid particulars relating thereto, and a copy of the certificate he received therewith, in a book to be kept by him for that purpose, and shall produce such book whenever required so to do by any inspector so appointed as aforesaid.

XII. And be it enacted, that it shall not be lawful for any party to carry on or teach Anatomy at any place, or at any place to receive or possess for anatomical examination, or examine anatomically, any deceased person's body after removal of the same, unless such party, or the owner or occupier of such place, or some party by this act authorized to examine bodies anatomically, shall, at least one week before the receipt or possession of a body for such purpose at such place, have given notice to the said Secretary of State or Chief Secretary, as the case may be, of the place where it is intended to practise Anatomy.

XIII. Provided always, and be it enacted, that every such body so removed as aforesaid for the purpose of examination shall, before such removal, be placed in a decent coffin or shell, and be removed therein; and that the party removing the same, or causing the same to be removed as aforesaid, shall make provision that such body, after undergoing anatomical examination, be decently interred

in consecrated ground, or in some public burial ground in use for persons of that religious persuasion to which the person whose body was so removed belonged; and that a certificate of the interment of such body shall be transmitted to the Inspector of the district within six weeks after the day on which such body was received as aforesaid.

XIV. And be it enacted, that no Member or Fellow of any College of Physicians or Surgeons, nor any Graduate or Licentiate in Medicine, nor any person lawfully qualified to practise medicine in any part of the United Kingdom, nor any professor, teacher, or student of anatomy, medicine, or surgery, having a license from His Majesty's Principal Secretary of State or Chief Secretary as aforesaid, shall be liable to any prosecution, penalty, forfeiture, or punishment, for receiving or having in his possession for anatomical examination, or for examining anatomically, any dead human body, according to the provisions of this act.

XV. And be it enacted, that nothing in this act contained shall be construed to extend to or to prohibit any post-mortem examination of any human body required or directed to be made by any competent legal authority.

XVI. And whereas an act was passed in the ninth year of the reign of his late Majesty, for consolidating and amending the statutes in England relative to offences against the person, by which latter act it is enacted, that the body of every person convicted of murder shall, after execution, either be dissected or hung in chains, as to the court which tried the offender shall seem meet; and that the sentence to be pronounced by the court shall express that the body of the offender shall be dissected or hung in chains, whichever of the two the court shall order; be it enacted, that so much of the said last-recited act as authorizes the court, if it shall think fit, to direct that the body of a person convicted of murder shall, after execution, be dissected, be and the same is hereby repealed; and that every case of conviction of any prisoner for murder, the court before which such prisoner shall have been tried shall direct such prisoner either to be hung in chains or to be buried within the precincts of the prison in which such prisoner shall have been confined after conviction, as to such court shall seem meet; and that the sentence to be pronounced by the court shall express that the body of such prisoner shall be hung in chains, or buried within the precincts of the prison, which ever of the two the court shall order.

XVII. And be it enacted, that if any action or suit shall be commenced or brought against any person for any thing done in pursuance of this act, the same shall be commenced within six calendar months next after the cause of action accrued; and the defendant in every such action or suit may, at his election, plead the matter specially, or

the general issue not guilty, and give this act and the special matter in evidence at any trial to be had thereupon.

XVIII. And be it enacted, that any person offending against the provisions of this act, in England or Ireland, shall be deemed and taken to be guilty of a misdemeanor, and, being duly convicted thereof, shall be punished by imprisonment for a term not exceeding three months, or by a fine not exceeding fifty pounds, at the discretion of the court before which he shall be tried; and any person offending against the provisions of this act in Scotland, shall, upon being duly convicted of such offence, be punished by imprisonment for a term not exceeding three months, or by a fine not exceeding fifty pounds, at the discretion of the court before which he shall be tried.

XIX. And in order to remove doubts as to the meaning of certain words in this act, be it enacted, that the words "person and party" shall be respectively deemed to include any number of persons, or any society, whether by charter or otherwise; and that the meaning of the aforesaid words shall not be restricted although the same may be subsequently referred to in the singular number and masculine gender only.

XX. And be it enacted, that this act shall commence and take effect from and after the 1st day of August in the present year.

XXI. And be it enacted, that this act may be altered or amended during the present session of parliament.

NOTE FROM DR. WILSON PHILIP.

To the Editor of the London Medical Gazette.

Cavendish-Square, Sept. 4th, 1832.

SIR,

You will oblige me by giving the following a place among the notices in the next number of the Medical Gazette, for the purpose of informing Dr. Hall that the removal of the brain and spinal marrow is an experiment of a wholly different nature from the destruction of these organs; and therefore that the grave charge he brings against me is unfounded.

The second apparent inconsistency stated by him, depends on facts with which he appears to be equally unacquainted. In my first experiments I found it impossible to excite in the heart, by stimuli applied to the brain and spinal marrow, the irregular actions so readily excited by them in the muscles of voluntary motion; but I discovered by experiments, made many years afterwards, that although this is the case, the action of the heart could be readily influenced, in its frequency, both by stimulants and sedatives applied to those organs.

I certainly was not aware from Dr. Hall's account of his Treatise, that it and his paper

were the same. Now that this gentleman has disclosed the cause of his anger, I can assure him it is *imagina y*. There was not one concerned who would not have been happy to have regarded his paper in the light that would have been most agreeable to him.

Dr. Hall must submit to a careful study of the present state of physiological knowledge before he can hope to make any addition to it. It is unfortunate for physiology that experimentalists are more apt to pursue their own fancies, than to undergo the labour of acquiring a knowledge of what has been done by others; yet on this foundation, in general, must all experimental progress be founded. Dr. Hall says he has given proof of being well acquainted with my Treatises, at the very moment that he demonstrates his ignorance of the leading points maintained in them; for it is impossible for a person either to have read them, or the accounts which have from time to time been published of the repetition by others of the experiments contained in them, without knowing that the removal and destruction of the brain and spinal marrow influence the animal economy in different, and in some respects, even opposite ways.

I shall take this opportunity of endeavouring to correct what I believe to be a common error, even among those who are well acquainted with physiology—I mean the opinion that the beating of all the arteries is the immediate effect of the contraction of the heart alone. All the facts on the subject, as far as I am capable of judging, assure us that the beating of the arteries, with the exception of those which receive their blood immediately from the heart, is the combined effect of the contraction of the heart and that of the preceding part of the artery. Hence it is that causes which make no impression on the heart often greatly influence the beating of distant arteries, and regulate the distance from the heart to which the beating extends, which, in the healthy state of the arteries, is never as far as the capillaries. In diseased states, the beating of the vessels, like other phenomena of the animal body, is influenced in various ways—a circumstance which Dr. Hall wholly overlooks*. In external inflammations, for example, of too small extent to affect the heart, a pulsation, as every one knows, is often perceived which has no

existence in the part at other times; the consequence of the debility of the inflamed vessels and of the arteries, which in the course of circulation precede them, being excited to increased action.—I am, sir,

Your obedient servant,

A. P. W. PHILIP.

MEDICAL APPOINTMENT.

DR. J. WYATT CRANE has been elected Physician to the St. George's and St. James's Dispensary, in the room of Dr. Somerville resigned.

WEEKLY ACCOUNT OF BURIALS,

From the BILLS OF MORTALITY, Sept. 4, 1832.

Abscess	5	Gout	1	
Age and Debility	56	Hæmorrhage	4	
Apoplexy	8	Hooping Cough	5	
Asthma	7	Inflammation	31	
Cancer	3	Inflammation of the		
Childbirth	5	Bowels & Stomach	24	
Cholera	157	Inflammation of the		
Consumption	49	Brain	1	
Convulsions	33	Insanity	1	
Dentition or Teething	6	Liver, Diseases of the	4	
Diabetes	2	Measles	13	
Diarrhœa	2	Mortification	5	
Dropsy	7	Paralysis	3	
Dropsy on the Brain	16	Rheumatism	1	
Dropsy on the Chest	4	Small-Pox	15	
Epilepsy	1	Spasms	2	
Erysipelas	2	Stone and Gravel	1	
Fever	15	Trush	2	
Fever Intermittent or		Tumor	2	
Ague	1	Unknown causes	2	
Fever, Scarlet	5			
Fever, Typhus	3	Stillborn	8	
Decrease of Burials, as compared with the } preceding Week				497

METEOROLOGICAL JOURNAL.

August 1832.	THERMOMETER.		BAROMETER.	
Thursday . 30	from 44 to 59		29.44 to 29.51	
Friday . . 31	42	63	29.63	29.72
September				
Saturday . 1	42	63	29.69	29.52
Sunday . . 2	44	63	29.82	29.98
Monday . . 3	41	65	30.02	30.17
Tuesday . . 4	40	63	30.21	30.16
Wednesday 5	39	64	30.05	30.00

Wind variable, S.W. prevailing.

The 30th ult. and 1st inst. cloudy, with frequent heavy rain; otherwise generally clear.

Rain fallen, 1 inch and .15 of an inch.

CHARLES HENRY ADAMS.

BOOK RECEIVED FOR REVIEW.

Practical Observations on Midwifery, with a selection of Cases, Part II. By John Ramsbotham, M.D. &c. Highley.

LITERARY INTELLIGENCE.

Nearly ready, a Treatise on Inflammations, containing their Pathology, Causes, Consequences, and Treatment; with their Effects on the various Textures of the Body; being an extension of "A Dissertation on Inflammation of the Membranes," to which the Jacksonian Prize for the year 1828 was awarded by the Royal College of Surgeons in London. By George Rogerson, Surgeon.

W. WILSON, Printer, 57, Skinner-Street, London.

* One of the chief points to be attended to in physiological experiments, is to distinguish the phenomena which depend on the healthy action of the part, from those which are the consequence of the state into which it is brought by the experiment. Dr. Hall reasons respecting the phenomena observed in a limb with a ligature thrown round it, which, affecting more the motion of the blood in the veins than the arteries, from the former being more pliable, as well as many of them more superficial, necessarily occasions more or less morbid accumulation of blood in the limb, and variously influences the action of its vessels, precisely as he would do were the limb in its natural state.